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Slow Food Foundation
for Biodiversity

Slow Food Presidia in Europe: A Model of Sustainability

An assessment of the sociocultural, agri-environmental and economic results

2000-2012

Publication co-financed by the European Union

and Compagnia di San Paolo

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The Slow Food Foundation for Biodiversity would like to thank the Presidia producers and coordinators that have contributed to this research project.

THE PRESIDIA PROJECT

This study examines the sociocultural, agri-environmental and economic sustainability of the Presidia, which were planned and developed by Slow Food from 2000 with technical coordination provided by the Slow Food Foundation for Biodiversity.

The Presidia bring together communities of producers who are willing to collaborate and jointly establish production rules and ways of promoting their product. The objective is to save native breeds, vegetable varieties and artisanal products at risk of disappearing. Presidia strengthen producer organization, promote the local area, preserve traditional methods and knowledge, and support sustainable practices.

Slow Food assists the producers (by organizing training and exchanges), promotes products through communicating their stories (of producers, knowledge, local areas and production methods) and can use the association's network to link producers with consumers (by means of events, the involvement of chefs and support for forms of direct sale such as farmers' markets and purchasing groups).

There are now over 400 Presidia in 50 countries around the world. Slow Food's efforts to protect these types of products are linked to its desire to oppose the growing globalization of consumption and production, a cultural standardization which is inevitably leading to reduced biodiversity. Biodiversity is considered not only in terms of genetic heritage but diversity of geographical areas, traditional cultures, food products, knowledge of food, and the nutritional, medicinal and cosmetic properties associated with the multitude of different animal and plant species.

Over the years, the Presidia project has become one of the most effective tools for putting into practice and exemplifying Slow Food's policies on agriculture and biodiversity in both developed and developing countries. The Presidia protect *good* products, i.e. with distinctive sensory qualities whose roots lie in local culture; *clean* products, i.e. produced using sustainable methods that respect the local environment and traditions; and *fair* products, i.e. produced in a way that respects people's rights and culture, while assuring them a reasonable financial return.

1 • Criteria for selecting Presidia

Slow Food's approach to quality is complex and multifaceted, the result of a continuous exchange of information with many local people (producers, cooks, technical experts, researchers, journalists, etc.). There are therefore a number of selection criteria and they must be evaluated carefully, both individually and in their interactions.

a. Taste

The food must be of distinctive quality from a sensory point of view. Quality is defined by local practices and traditions.

b. History, culture and place

The food must be linked to the memory and identity of a group. It can be a vegetable species, variety, ecotype or animal population that is native or well acclimatized into a specific territory over the medium or long term. In the case of processed food products, the main ingredient must be of local provenance. The relationship with place must be documented by written and oral evidence. The food must be linked to a specific area from an environmental, socio-economic and historical perspective.

c. Small scale

The food must be produced in limited quantities by small farms or producers. The producers must be artisans who apply traditional knowledge to all the production phases. This knowledge must have been passed down through their family or

learned from another producer over years of apprenticeship. Their products have a specific identity and distinctiveness and are not standardized.

d. Risk of extinction

The food must be at a real or potential risk of extinction.

e. Environmental sustainability

Cultivation techniques must preserve the fertility of the land and hydrographic ecosystems and avoid the use of synthetic chemicals as much as possible. Agricultural systems and production facilities must preserve the agricultural landscape and traditional architecture. Intensive monocultures, intensive livestock farming, unsustainable fishing techniques, industrial production and the use of genetically modified organisms (including in animal feed) are not allowed.

f. Social sustainability

The producers must take an active role and be able to impact on business decisions. Producers must be willing to collaborate, deciding together on production rules (the protocol) and how to promote their product (creating a food community).

2 • Narrated quality

To better understand these criteria, it is important to examine how Slow Food defines quality. It is a complex and innovative concept that has matured over a period of twenty years through the practical experience Slow Food has gained in direct contact with hundreds of communities of small-scale producers around the world.
Quality is usually identified using chemical and physical analyses, tasting panels, and other measurable and definable parameters. This is a technical approach that is valid in a comparative, objective context, but does not adequately take into account everything that lies behind a local product and has developed over centuries of history.
In Slow Food's definition, the quality of a food product is a narrative. It starts from the origin of the product (according to the circumstances, this may be the place where a species was domesticated or diversified; the place where a variety or a breed adapted or evolved naturally or the place where a cultivation or processing method was developed) and then considers the characteristics of the environment, local knowledge (within the community), the product's local reputation, processing techniques, recipes, storage methods, marketing, environmental sustainability and, of course, sensory and nutritional characteristics.

3 • The general objectives of Presidia

The objectives of the Presidia are numerous, complex and multifaceted, but can be grouped into four areas.

- **environmental objectives**: defending biodiversity, improving the sustainability of food production.
- **economic objectives**: increasing producer income, developing locally driven activities, increasing employment.
- **social objectives**: improving the social role of producers, strengthening their organizational capacity and self-esteem.
- **cultural objectives**: strengthening producers' cultural identity and promoting production areas.

The basic philosophy, objectives and approach are similar for all the Presidia in every part of the world. However the projects vary according to the geographical, social, cultural and economic context. The ability to adapt and assume different forms is essential; Presidia change according to the relationships between environmental, technical, social and economic factors so they can make the most of the potentialities presented by the community and local area.

Presidia represent a model with the same basic recipe and ingredients, but the extent and methods of application vary according to the different situations encountered. The model is an example of virtuous production that can be applied to other products and other contexts. By promoting a product with a strong identity, the Presidia help the local community to understand their local system and focus production in a different direction to that dictated by the principles of agribusiness.

As part of these activities to promote models and practical actions which preserve food and agricultural biodiversity (included in the Association's plans for 2012 and cofinanced by the European Commission through its funding program DG ENV - NGOs Operating grant 2012) it was decided to not only encourage the launch of new Presidia and develop existing European Presidia, but to also carry out an assessment of the sociocultural, agri-environmental and economic sustainability of the 269 European Presidia.

To do this work a significant number of case studies were selected (17% of the total) which were representative of the various countries and product categories (fruit and vegetables, cheese, animal breeds, processed products, etc.). An assessment grid was drawn up, using the main sociocultural, agri-environmental and economic indicators used in other scientific studies and therefore recognized within international scientific circles.This approach could in future be enhanced by including additional indicators from new methods of agri-environmental analysis, such as eco-balances. The final section contains bibliographic references used to support the study which may be useful for further investigation.

4 • The Presidia project in Europe

There are 269 European Presidia in a range of different product categories.

Their size varies a great deal, but they usually involve a small number of producers (from 3 or 4, up to a maximum of around 70), often organized in the form of associations (formalized to varying extents). The majority are in Italy (224), the country where the Presidia project originated in 2000. Italy is also the country that first introduced an identifying trademark for the labels of Presidia products. The project then extended to other countries in subsequent years. Presidia are often located in marginal areas and are sometimes a defense against overdevelopment and environmental degradation.

The European Presidia tend to focus on some crucial issues for small-scale agriculture and farming: protection of mountain pastures and pastoral farming, the defense of traditional landscapes (for example old orchards, centuries-old terraces and olive groves), selection and propagation of traditional seeds by communities, the protection of raw milk for dairy products, animal welfare, protection of small-scale onshore fishing, transparent labeling, ecologically sustainable packaging and the preservation of traditional artisanal knowledge linked to processing methods.

Another characteristic of European Presidia is the central role of chefs in promoting products. In 2009, a project in Italy (the "Alliance Between Chefs and Slow Food Presidia") brought together 325 quality restaurants keen to present Presidia products on their menus, particularly those from their region. They not only promoted them for their sensory qualities, but also for their cultural value, and the opportunity to raise awareness of Slow Food's project to protect biodiversity. In summer 2012 this initiative began to expand to other European countries and a first group of restaurants belonging to the Alliance was created in the Netherlands.

The 11 Presidia in the Balkans should be considered separately. The situation of food and agriculture in the Balkan countries is complex. Fifty years of real socialism changed the structures of traditional agriculture, with an emphasis on quantity rather than quality and traditional approaches. Furthermore, today production systems are being drastically rationalized to meet European hygiene and safety requirements so as to qualify for EU membership. This often means that small-scale producers, herders and farmers have to abandon their work. Fortunately there are still some traditional local producers in various parts of the region, particularly in the less industrialized inland areas. There is a risk that they will disappear within a short time. This would be an irreplaceable loss for those countries and for the rest of Europe. It would mean losing biodiversity, local control over areas, and long-standing traditional knowledge that is deep rooted in the social fabric. A way of life was able to survive 500 years of Turkish rule and 50 years of socialism, but could be swept away through a misguided conception of modernity. Apart from their value for the above reasons, these Presidia also have an important role in stimulating public awareness of the risk that these products might disappear, of how much they can still offer their regions (which have not yet been completely captured by agribusiness) and the opportunity of supporting part of their traditional food heritage.

OBJECTIVES OF THE STUDY

The system of Slow Food Presidia is too complex to analyse using simple measurements or simulation models.

This study simplifies the system to make it easier to examine. The indicators used are mainly qualitative and are a compromise between current scientific knowledge, the need to be concise, ease of use and availability of accurate data.

The method adopted has four objectives:

- Assess the sustainability of a Presidium at time T (T_0 being the launch date of the Presidium and T_1 being April 2012);
- Monitor how the project has progressed in terms of sustainability as it developed;
- Offer Presidium producers and coordinators a tool to better understand the concept of sustainable agriculture and accurately assess the sustainability of their products;
- Facilitate dialog and exchange not only internally (between the Presidium producers), but also with others outside the project regarding the concept of sustainable agriculture and the contribution that the Presidia can offer.

Monitoring the sustainability of a system is a long-term exercise that also involves using qualitative indicators so as not to exclude some essential characteristics of sustainability. From a technical perspective, indicators with a qualitative response, such as those used in this study, may not be perfect. However the success of the assessment does not only depend on the indicators in themselves, but also on the process of designing the study, and holding discussions with the various parties involved to get feedback and any necessary modifications.

The indicators are always an imperfect summary of a complex situation, but they highlight the framework within which they have been developed. The indicators are useful not as absolute measures, but to show the progress Presidia have made towards their sustainability objectives (economic, social and environmental) over the time period considered.

1 • The sample for analysis

Forty-seven of the 269 European Presidia were analyzed, or about 17%.

The total of 269 Presidia was based on the number of projects active in the month of April 2012.

The Presidia considered were not only from countries belonging to the European Union, but included some Presidia from neighboring countries which are either due to join soon (Croatia), potential candidates (Bosnia Herzegovina) or countries included in the European Neighborhood Policy (Georgia and Armenia).

The Presidia in Norway and Switzerland (totaling 27) were not included (countries not belonging to the European Union).

As the Presidia are complex projects, the effects of which unfold over the medium to long term, the Presidia chosen must have been launched by 2008 at the latest (with some rare exceptions).

The sample was constructed according to the criteria shown below.

Distribution of Presidia based on typology of product

Some categories such as "coffee, cocoa, tea and infusions", "honey" and "oil" were excluded because they were not well represented in the countries being studied. The category "fish" was also excluded because it involves a completely different situation.

RELATIONSHIP OF SAMPLE/PRESIDIA PER TYPOLOGY			
TYPOLOGY	PRESIDIA IN SAMPLE	PRESIDIA	PERCENTAGE
Coffee, cocoa, tea and infusions	0	1	0
Cereals and flour	2	8	25
Fruit and derived products	5	27	18
Cheeses and dairy products	11	59	17
Legumes and pulses	5	20	25
Honey	0	1	0
Oil	0	1	0
Vegetables and vegetable preserves	7	34	21
Bread, pastries, cakes and baked goods	1	14	7
Fish	0	17	0
Animal breeds	7	39	18
Salt	0	2	0
Cured meats and meat products	7	35	20
Herbs, spices and wild products	1	4	25
Wine and alcoholic beverages	1	7	14
Total	47	269	17

Geographical distribution of the sample

The Presidia are distributed very unevenly (from the over-200 Presidia in Italy to countries with only one Presidium such as Georgia, Ireland, Armenia, Cyprus, Croatia, Portugal and Hungary). To take account of this uneven spread, the largest number of countries possible was included, with sampling percentages per country varying considerably: from 100% in countries with only one Presidium to 13 – 16% in countries with the largest number of Presidia.

RELATIONSHIP OF SAMPLE/PRESIDIA PER COUNTRY			
COUNTRY	PRESIDIA IN SAMPLE	PRESIDIA	PERCENTAGE
Armenia	1	1	100
Austria	1	5	20
Bosnia Herzegovina	1	2	50
Belarus	0	1	0
Bulgaria	1	3	33

Cyprus	0	1	0
Croatia	1	1	100
France	2	15	12
Georgia	1	1	100
Germany	1	4	25
Ireland	0	1	0
Macedonia	0	2	0
Italy	32	201	16
Netherlands	1	8	13
Poland	0	2	0
Portugal	0	1	0
United Kingdom	0	5	0
Romania	1	2	50
Spain	2	9	22
Sweden	1	3	33
Hungary	1	1	100
Total	47	269	17

Nebrodi Black Pig – © Alberto Peroli

THE ANALYSIS PROCESS

Slow Food's sustainable development concept can essentially be described by three fundamental dimensions:
• **social sustainability**: the capacity to guarantee access to what can be considered basic human rights (safety, health, education) and conditions of wellbeing (enjoyment, peace and social relations), in a fair way within communities.
• **environmental sustainability**: the capacity to maintain the quality and renewability of natural resources over time, to preserve biodiversity and guarantee the integrity of ecosystems.
• **economic sustainability**: the capacity to generate income and work over the long term and to achieve eco-efficiency, in other words the rational use of available resources and reduced exploitation of non-renewable resources.

In order to develop a methodology for assessing and monitoring the sustainability of Presidia, a number of recent research investigations into the influence of agriculture on the environment were consulted. Of particular interest were studies on the loss of natural capital due to agricultural practices and its main consequences, such as soil erosion and the impoverishment of animal and plant biodiversity. These studies assess the environmental impact of the agricultural sector through a series of indicators that can quantify the degree of sustainability.

The term "indicator" in this context was defined as a variable providing information on other variables: this provides more accessible data which can then be used as a reference parameter for decision-making. Assessment models developed in the social sciences and economics were of course also considered, making the approach a multidisciplinary one.

The analysis of each individual Presidium in the sample was based on about **50 indicators** (52 for the vegetable world, 51 for animal breeds and 52 for processed animal-origin products)—a sufficiently high number to adequately explain the complexity of the Presidium system, but limited enough to allow easy application. The initial hypothesis assumed it would be possible to quantify the various indicators of a complex agricultural system (Presidium) through assigning a numerical score, to weigh the score and then to aggregate the information to arrive at an overall score for the sustainability of each individual Presidium.

A **questionnaire** was drawn up, based on Slow Food's guiding principles (developed in the production rules of each Presidium), which was submitted to the project coordinators in order to ascertain the situation at time T_0 (Presidium launch) and time T_1 (April 2012).

The questions in the questionnaire were defined on the basis of an assessment grid formulated and discussed by agronomists, sector experts and produces involved in the project. This grid was constructed with **three scales**:
•the **sociocultural scale** considered the intrinsic characteristics of the product, its cultural value and the opportunities to create and develop internal and external relations involving the reference community;
• the **agri-environmental scale** analyzed the capacity of the Presidium system to act as a model for virtuous action in maintaining and managing non-renewable resources;
• the **economic scale** assessed the effects of the development and efficiency of systems introduced over the years.

The method provides for a maximum score of 100 points for each of the three sustainability scales; each indicator has a minimum score of 0 and a maximum of 10. Each Presidium's score for each of the three sustainability scales is the sum of the weighted value attributed to each indicator. The indicators may be quantitative (based on numbers) or qualitative (based on structured descriptions).

1 • Sociocultural scale

The 22 indicators proposed for the sociocultural scale are not a complete and definitive list of the social dimension in agriculture and its closely related geographical and cultural dimensions, but are an attempt to define the concepts of interaction and social relations in the context of small-scale agricultural activity. The indicators are grouped into four components, each with a value of 25.

The first component is **product**, which is composed of 4 indicators, each with a weight of 6.25. They cover improvements to the product's intrinsic characteristics (preservation, processing and sensory qualities) and product awareness in the area. The first 3 indicators have a choice of two responses, while the indicator on geographical extent of consumption refers to group level (score = 0), local (2.5), regional (5), national (7.5) and finally international (10).

The second component is **internal relations**, which is composed of 7 indicators each with a weight of 3.57. These identify the decision-making mechanisms and level of democracy within the group of producers involved in the Presidium. It is important to highlight the presence of young people below 35 years and women (score as a % of the number of producers 0%=0; 25%=2.5; 50%=5; 75%=7.5; 100%=10) and whether there is a formal organization of the group (yes/no). The latter issue is linked to the decision-making indicator, with the question whether there is a "predominant" person (Yes/No response). In order to improve internal relations it is important for group members to have opportunities to meet and receive training. These are assessed on a numerical basis (score 0 = 0 meetings; 5= from 1 to 3 meetings; 10=> 3 meetings during the year).

The third component is **external relations**, which is subdivided into 6 indicators (weight 4.16). This highlights the relations Presidium members have established over the years with public and private institutions, with the Slow Food network and in particular with consumers. This component only has two indicators which are measured using numbers: participation at Slow Food and other events (number/year). All the other indicators just have Yes/No responses with scores 0 or 10.

The fourth component is **culture and local area**, which is composed of 5 indicators each with a weight of 5. It highlights the cultural link between the food product and its local area, traditions and knowledge. All the indicators are Yes/

Sibillini Mountains Pink Apples – © Slow Food Archive

No responses except for tourist development which can be assessed according to the number of actions undertaken/year.

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		INDICATORS		MEASUREMENT UNIT	VALUE
Good	Taste	1	Product	a1	Preservation	no/yes	0; 10
				a2	Processing	no/yes	0; 10
				a3	Sensory quality	no/yes	0; 10
				a4	Extent of consumption	Local group; Regional; National; International	0; 2.5; 5; 7.5; 10
Fair	Social sustainability	2	Internal relations	a5	Role of young people	% producers	0; 2.5; 5; 7.5; 10
				a6	Role of women	% producers	0; 2.5; 5; 7.5; 10
				a7	Organization of producers	no/yes	0; 10
				a8	Decision-making structure	no/yes	0; 10
				a9	Participation	no/yes	0; 5; 10
				a10	Sharing of knowledge	no./year	0;5;10
				a11	Training of producers	no./year	0; 5; 10
		3	External relations	a12	Relations with public and private institutions	no/yes	0;10
				a13	Relations with the Slow Food network	no/yes	0;10
				a14	Media relations and communication	no/yes	0;10
				a15	Relations with consumers	no/yes	0;10
				a16	Slow Food events	no/yes	0;5;10
				a17	Other events	no./year	0; 5; 10
	History, culture, link to the local area	4	Culture and local area	a18	Product-place identification	no/yes	0; 10
				a19	Architectural heritage	no/yes	0; 10
				a20	Horizontal transmission of knowledge	no/yes	0; 10
				a21	Vertical transmission of knowledge	no/yes	0; 10
				a22	Tourism development	no./year	0; 5; 10

> Table Sociocultural scale

2 • Agri-environmental scale

The indicators in this category show the action of Slow Food Presidia in addressing the risks of biodiversity loss and the welfare of the environment, plants and animals.
This scale is again made up of 5 components with a weight of 20 for the vegetable world and processed animal-origin products, and from 4 components weighted 25 for animal breeds. Indicators may also be different based on the typology of fresh or processed product, or whether it is of animal or vegetable origin.

The plant world

For plant products, the first component is **biodiversity**, comprising 5 indicators (variety, processing methods, landscape, seeds, intercropping), each with a weight of 4 and Yes/No responses.

The second component is **local area**, with a Yes/No response for defense of traditional methods and a multiple response for crop diversification (as a % of the number of crops present in the farm). Each of these indicators has a weight of 10.

The third component is **soil and water**, with indicators for fertilization, irrigation and crop rotation. Responses are expressed as a % of farms within the group which carry out fertilization and rotation (0% = 0; 25% = 2.5; 50% = 50; 75% = 7.5; 100% = 10); the indicator for irrigation has different values according to the type and quantity of water saved (flood

irrigation = 0, drip irrigation = 5, emergency irrigation = 10). The indicators of this component all have a weight of 5.

The fourth component is **crop protection**, which is made up of 7 indicators with a weight of 2.86 and responses expressed as a % of the number of farms, shows the extent that synthetic products are used in managing crops.

The fifth component is **energy** and considers the use of renewable energies within the farm and the use of eco-sustainable materials for packaging. Responses are expressed as a % of the number of farms and the indicators have a weight of 10.

> Table Agri-environmental scale with indicators for Presidia of plant species.

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		INDICATORS		MEASUREMENT UNIT	VALUE
Clean	Risk of extinction	1	Biodiversity	b1	Variety	no/yes	0; 10
				b2	Processing technique	no/yes	0; 10
				b3	Landscape	no/yes	0; 10
				b4	Seeds	no/yes	0; 10
				b5	Intercropping	no/yes	0; 10
	Environmental sustainability	2	Local area	b6	Production diversification	% species	0; 2.5; 5; 7.5; 10
				b7	Recovery and protection actions	no/yes	0; 10
		3	Soil and water	b8	Rotation	no/yes	0; 10
				b9	Irrigation	flood; localized; emergency	0; 5; 10
				b10	Fertilization	% farms	0; 2.5; 5; 7.5; 10;
				b11	Organic fertilization	% farms	0; 2.5; 5; 7.5; 10;
		4	Crop protection	b12	Pest and disease protection	% farms	0; 2.5; 5; 7.5; 10;
				b13	Natural pest and disease protection	% farms	0; 2.5; 5; 7.5; 10;
				b14	Weed control	% farms	0; 2.5; 5; 7.5; 10;
				b15	Natural weed control	% farms	0; 2.5; 5; 7.5; 10;
				b16	Post-harvest treatments	% farms	0; 2.5; 5; 7.5; 10;
				b17	Natural post-harvest treatments	% farms	0; 2.5; 5; 7.5; 10;
				b18	Certification	% farms	0; 2.5; 5; 7.5; 10;
		5	Energy	b19	Renewable energy	% farms	0; 2.5; 5; 7.5; 10;
				b20	Packaging	% farms	0; 2.5; 5; 7.5; 10;

The animal world

With regard to **animal products** (breeds, cured meats and cheese), the first component is **biodiversity**, which is composed of 3 indicators (breeds, processing techniques, landscape), each with a weight of 6.67 and Yes/No responses.

The second component is **local area**, which is the same as in the case of products of plant origin.

The third component is **livestock farming**, which comprises 12 indicators (each weight of 1.67) relating to farming methods and animal diet. Most of the responses are multiple response according to the type; only the indicators finishing, mutilation, and certification are expressed as a % of farms belonging to the Presidium.

The fourth component is **processing**, which consists of 5 indicators, with a weight of 4 each, that vary according to the type of product (cheese or cured meat). In both cases the indicators, which refer to raw material origin, aging facilities and processing techniques, are multiple response according to the type of action or materials.

The fifth component is **energy**, which is the same as in the case of products of plant origin.

> Table Agri-environmental scale with indicators for Presidia of animal products.

SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		B	M	C	INDICATORS	MEASUREMENT UNIT	VALUE
Clean	Risk of extinction	1	Biodiversity	b1	b1	b1	Breeds	no/yes	0; 10
				b2	b2	b2	Processing techniques	no/yes	0; 10
				b3	b3	b3	Landscape	no/yes	0; 10
	Environmental sustainability	2	Local area	b4	b4	b4	Production diversification	% breeds	0; 2.5 ;5; 7.5; 10
				b5	b5	b5	Recovery and protection actions	no/yes	0; 10
		3	Livestock farming	b6	b6	b6	Reproduction	purchased; born on farm	5; 10
				b7	b7	b7	Mountain pasture	yes; no	10;0
				b8	b8	b8	Shelter	Open areas; closed shed	10;0
				b9	b9	b9	Diet 1	100% produced on farm; 50% farm-50% purchased; all purchased	10; 5;0
				b10	b10	b10	Diet 2	Natural mixture; industrial feed	10;0
				b11	b11	b11	Silage	no; hay; corn	10;5;0
				b12	b12	b12	GMOs feed	no GMOs certified; no GMOs but not certified; GMOs	10; 5;0
				b13	b13	b13	Finishing	% farms	0; 2.5; 5; 7.5; 10
				b14	b14	b14	Mutilation	% farms	0; 2.5; 5; 7.5;10
				b15	b15	b15	Effluent	According to regulations; improvement actions	0; 10
				b16	b16	b16	Slaughtering	Own slaughtering; nearby; distant	10; 5;0
				b17	b17	b17	Certification	% farms	0; 2.5;5; 7.5;10
		4	Processing		b18		Milk purchased	No; yes	10;0
					b19		Milk processing	max 2 x milking; more milking	10;0
					b20		Rennet	Self-produced; natural; chemical	10; 5;0
					b21		Enzymes	no. self-produced; purchased	10; 5;0
					b22		Aging facilities	natural; partially conditioned; totally conditioned	10; 5;0
		4	Processing			b18	Meat origin	Own; known farm; market	10; 5;0
						b19	Meat purchase	no; pieces; whole	10; 5;0
						b20	Casing	natural; synthetic	10;0
						b21	Additives/flavors	natural. nitrites. artificial	10; 5;0
						b22	Aging facilities	Natural. partial conditioning; total conditioning	10; 5;0
		5	Energy	b18	b23	b23	Renewable energy	% farms	0; 2.5; 5; 7.5;10
					b24	b24	Packaging	% farms	0; 2.5; 5; 7.5;10

Indicators shared by all the categories (breeds – B –, cured meats – M –, and cheese – C–) are shown in yellow, those only for cheese are in green and those for cured meats in blue.

3 • The economic scale

The 10 indicators proposed for the economic scale enable us to understand the economic and employment potential of the Presidium system, but without basing this on financial statements and/or an economic analysis of production costs and prices.
The indicators are subdivided into the two components **development** (with a weight of 50) and **efficiency** (with an identical weighting). The first component shows changes in the number of producers belonging to the Presidium, areas farmed and quantities produced as a % increase or decrease compared to the situation before the Presidium was set up. This component also records any expansion of the farm/enterprise (Yes/No response). Each of these indicators has a weight of 12.5.
In the second component, indicators with a Yes/No response are as follows: increase in employment, new commercial channels, negotiating power and economic partnerships. The price indicator rises when the sale price improves, as the situation is more profitable for producers, while the indicator for market diversification refers to the geographical distribution of the product. All the indicators in the efficiency component have an individual weight of 8.3.

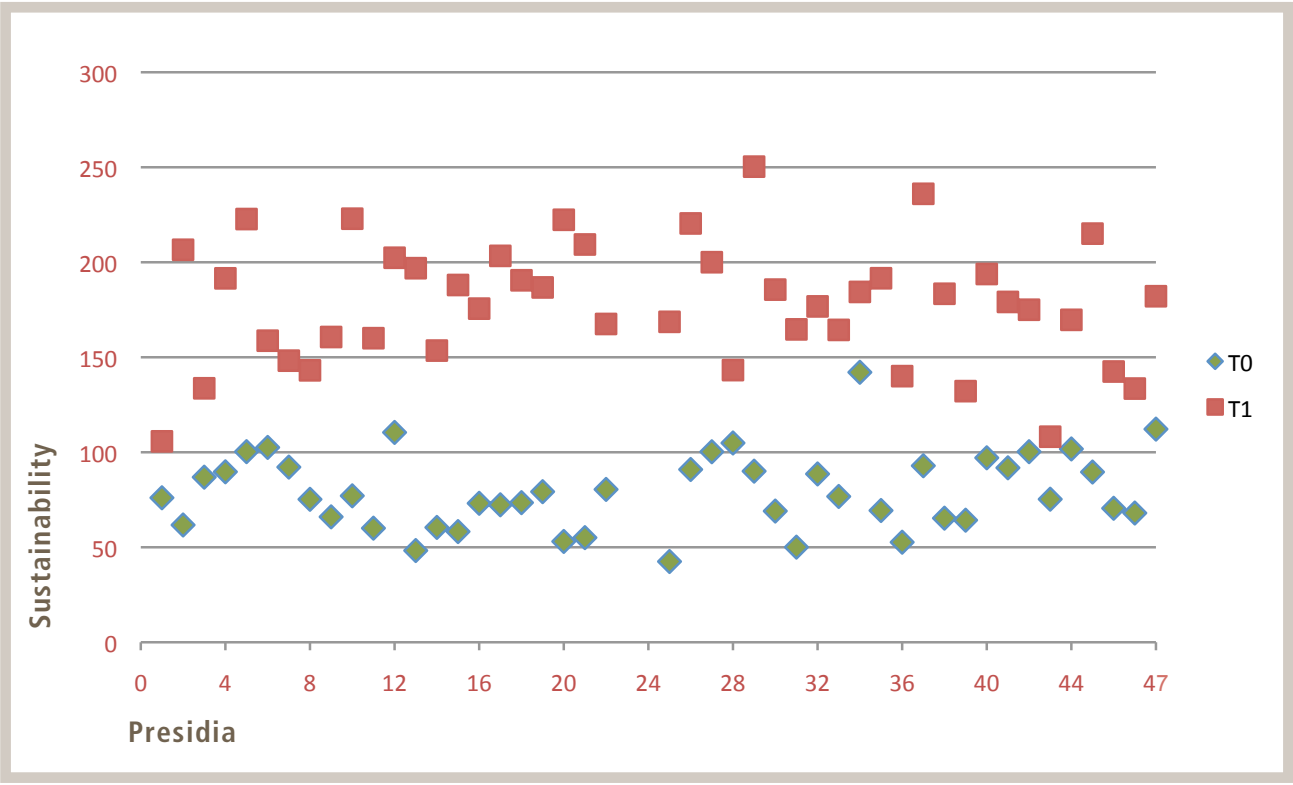
SLOW FOOD DIMENSION	PRESIDIUM CRITERIA	COMPONENTS		INDICATORS		MEASUREMENT UNIT	VALUE
Fair	Small-scale	1	Development	c1	Area	%	0; 2.5; 5; 7.5; 10
				c2	Number of producers	%	0; 2.5; 5; 7.5; 10
				c3	Quantity produced	%	0; 2.5; 5; 7.5; 10
				c4	Expansion of farm	no/yes	0; 10
	Economic sustainability	2	Efficiency	c5	Employment	no/yes	0; 10
				c6	Market diversification	Sale within farm Local Regional National International	0; 2.5; 5; 7.5; 10
				c7	New commercial channels	no/yes	0; 10
				c8	Producers' negotiating power	no/yes	0; 10
				c9	Sale price	%	0; 2.5; 5; 7.5; 10
				c10	Economic partnerships	no/yes	0; 10

Limpurg Ox – © Murnau Werdenfelser

RESEARCH RESULTS

This assessment study considered 47 European Presidia, of which 22 were based on plant species and 25 on animal products. In the case of processed products, classification of type was determined by the sector the raw material belonged to. Each scale (sociocultural, agri-environmental and economic) was given a maximum score of 100, with a threshold value of 50. Each scale is independent and non-cumulative: for example a low score on the agri-environmental scale cannot be compensated by a high score on the sociocultural scale. However, by adding up the three scores (one for each scale) it is possible to obtain a single score which gives an overall assessment of the Presidium.
The data at time T_0 represent the initial situation when the Presidium was set up, while the data at time T_1 are a good representation of the situation in April 2012 when data were collected.
Figure 1 clearly shows how all the Presidia studied have significantly improved their position on the total sustainability scale as a result of actions undertaken.

> Figure 1 – Analysis of total sustainability of the 47 Presidia examined.

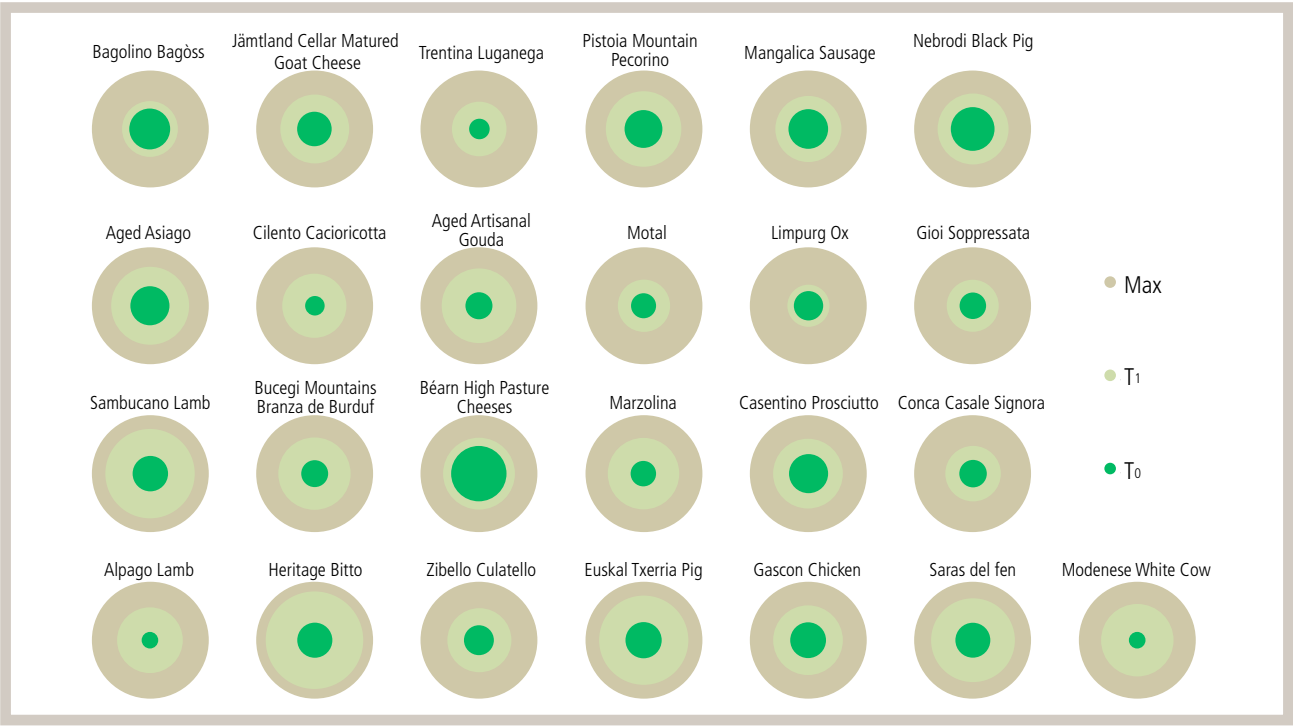


Considering total sustainability, extremely good performances are evident for plant-based Presidia in the following cases (Fig.2): Ustica Lentil Presidium, Salina Caper Presidium, Vessalico Garlic Presidium and Podzegaca Plum Slatko Presidium, all with total sustainability above 200. It is particularly interesting to see the boost in sustainability for the Slatko Presidium and Ustica Lentil Presidium since formation.

> Figure 2 – Plant-based Presidia

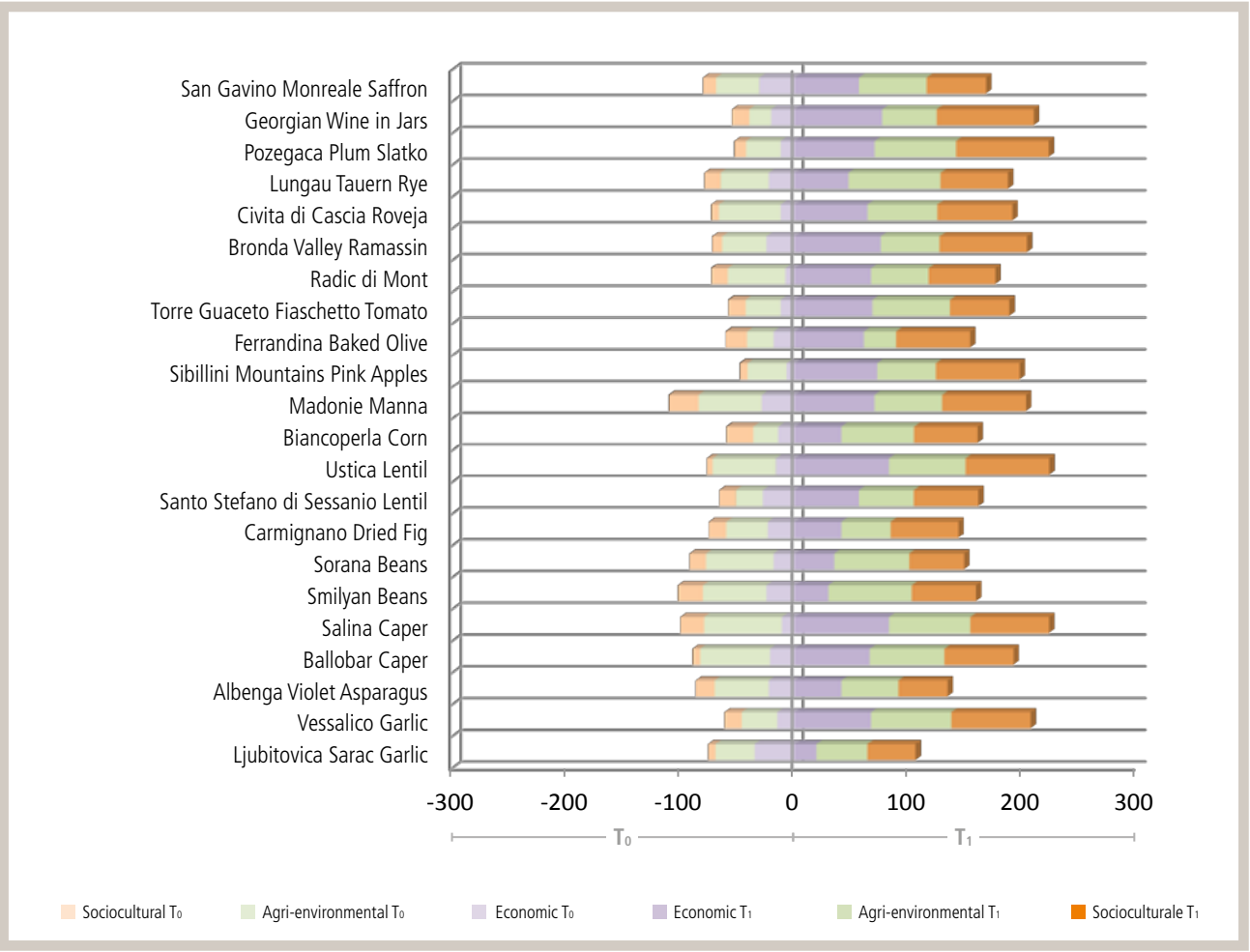
For the animal-based Presidia (Fig. 3), the progress made by producers of Heritage Bitto, with an extremely high sustainability score, surpasses that of all the other Presidia. In Presidia protecting animal breeds, the Sambucano Lamb and Euskal Pig achieve very good scores. While the initial situation for Heritage Bitto was already very favorable, in the other two cases the work done by producers following the creation of the Presidium was crucial in achieving the improvements to sustainability which have led to the current results.

> Figure 3 – Animal-based Presidia



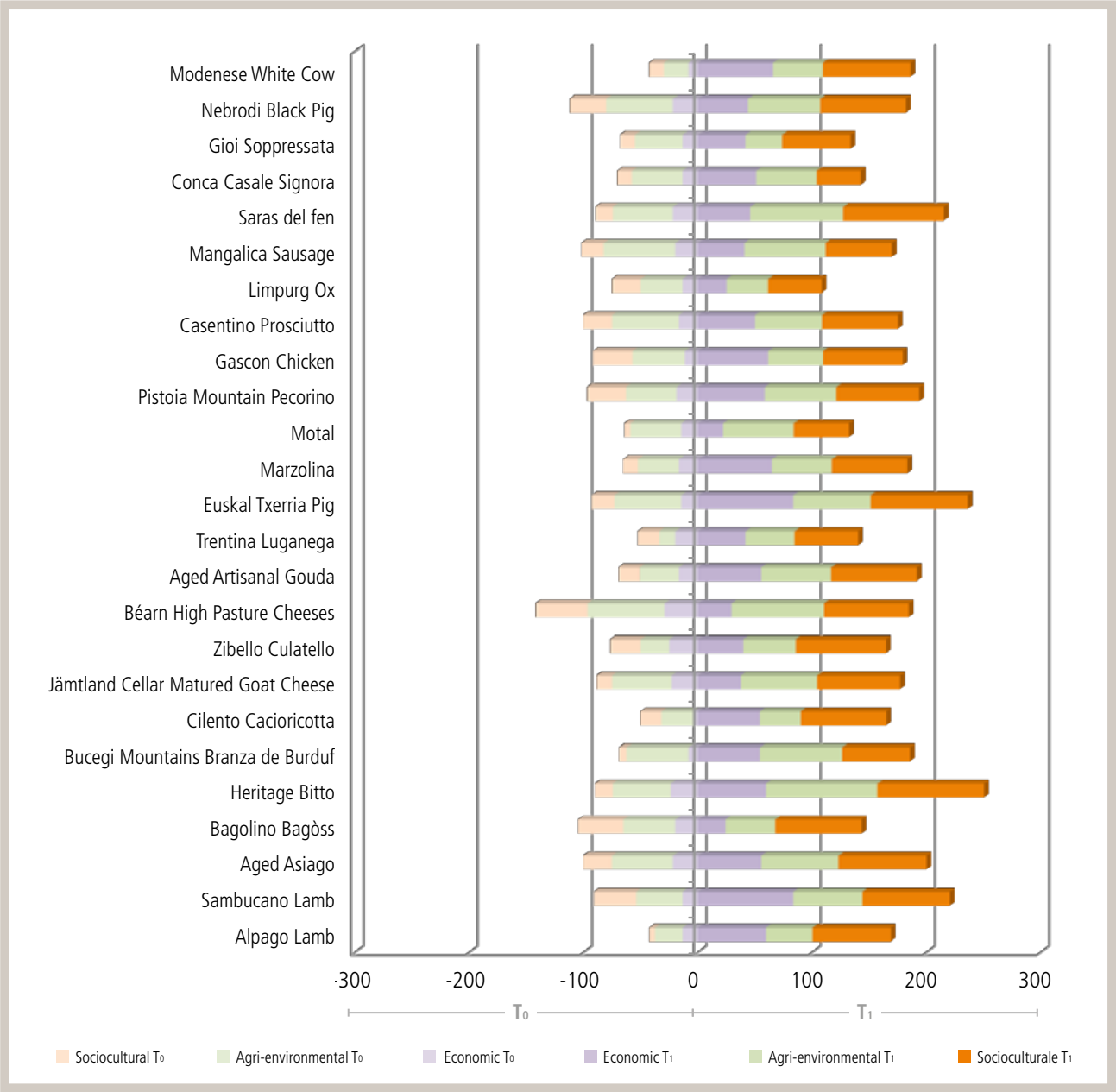
If the three individual sustainability scales are considered, it is possible to see (Figs. 4-5) that all the Presidia have recorded a substantial increase in sociocultural sustainability, due in almost all the cases studied, to the significant increase in internal relations within the producer group and their external relations, greater producer awareness of the value of their work and product (due to participation in events and communication efforts). In some cases this was further strengthened by creation of a producer association, which improved their organization and negotiating power.
The economic results of all the Presidia are also encouraging.

> Figures 4 – Aggregated data of the three scales (Plant-based Presidia)



Heritage Bitto – © Franziska Doswald

> Figure 5 - Aggregated data of the three scales (Animal-based Presidia)



Finally there are positive results on the agri-environmental sustainability scale involving a general reduction in the use of synthetic chemicals (for plant-based products) and an improvement in the quality of animal diet, with a reduction or elimination of silage (for animals), and elimination in various cases of feed containing GMOs. There are also weak points, particularly due to the energy component as there is still only limited use of alternative energies and packaging materials with low environmental impact.

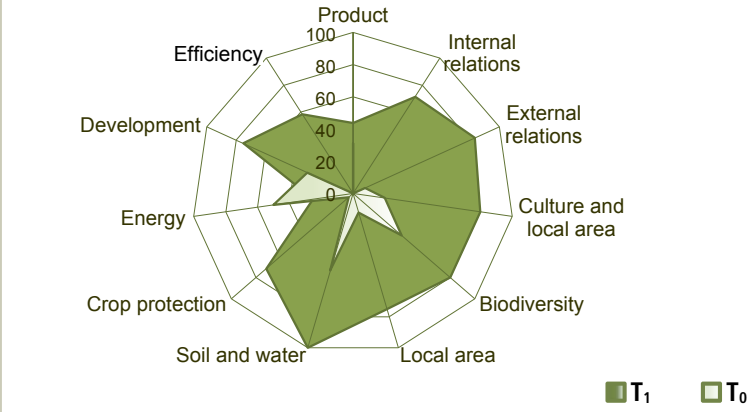
1 • Presidia results

We present below a summary of the results for each Presidium, starting with plant-based products. The first group of Presidia (shown with a dark color) have total sustainability values at T_1 greater than 200; the second group (medium color) have values between 150 and 199; the third group (pale color) have values below 150. The Presidia are presented in alphabetical order within each group.
Each Presidium has a radar plot showing results for the various components, giving an overview of the data and highlighting strengths, weaknesses and improvements in sustainability.

The plant world

Vessalico Garlic – Liguria, Italy — Presidium launch date 2000

Vessalico, a small village in the Upper Arroscia Valley, is home to an ancient variety of garlic. Cultivation is entirely manual and harvested bulbs are woven into long braids called reste.

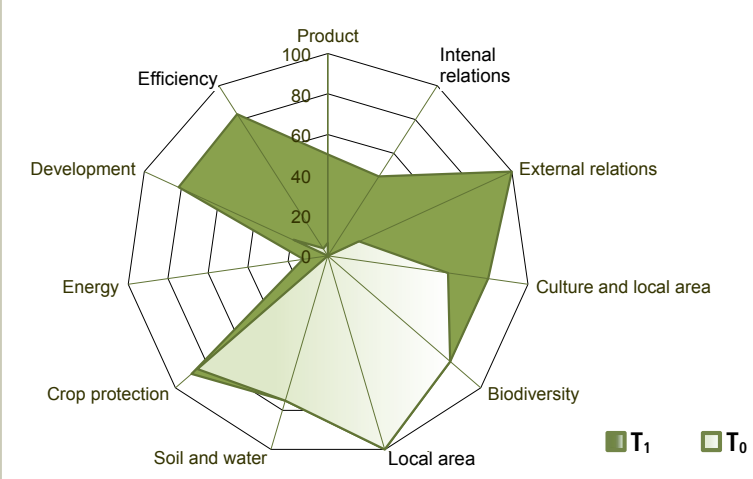


All components of all scales are growing considerably, particularly those linked to the management of cultivation.

The excellent values on the sociocultural scale are due to the fact that the women have always been involved in processing and braiding the garlic (there are now two women owners but in each family women play a significant role in the activity). Though it is a marginal area, the producers' average age has dropped to 35-45 years. The creation of a cooperative (formed at the start) has required greater interaction between producers and regular meetings, also because almost 70% of the garlic is sold collectively. The strongly positive values on the agri-environmental scale are the result of adopting sustainable agricultural practices. The Presidium moved from a conventional form of agriculture to a certified organic system in the early days of its activity. The improvement in economic sustainability is due to a number of factors. The quantity produced has increased (from 2,000 braids to 20,000) and garlic-based preserves are also made now, in the shared processing workshop established by the Presidium. The number of farms has increased (from 6 to 9) and the area of land cultivated has risen from a few hectares to 20. The market has been diversified: previously the garlic was known at local level and sold at the Festival of Garlic; the festival is still a major market for direct sale, but the increased production has enabled the market to be extended nationally (50%), and internationally (almost 10% of production), while 10-15% is sold online. The price of the garlic has also improved significantly.

Salina Caper – Sicily, Italy — Presidium launch date 2002

The caper bush is an integral part of the landscape on the island of Salina and in the past capers were a cornerstone of the island's economy. The capers are picked by hand and placed in wooden barrels in layers separated by coarse salt. They are ready to eat after about a month.

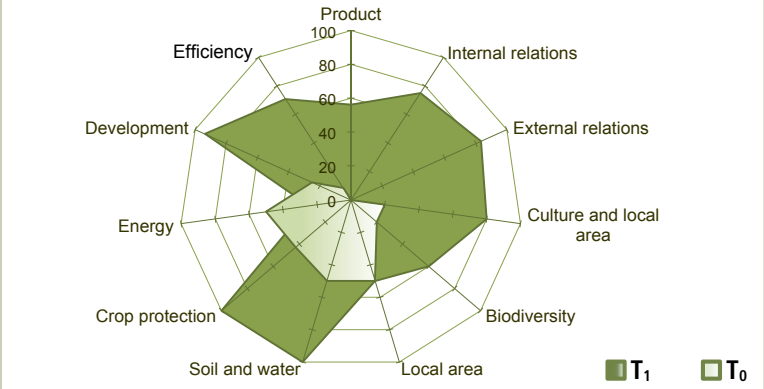


There is noteworthy growth of all components which, in some cases, are reaching their maximum value. Only the *energy* component is growing slowly. A few of the components of the agri-environmental scale (*local area* in particular) started out in great shape.

The growth in sociocultural sustainability has been due to an improvement in processing methods and expanded consumption, a strengthening in internal and external relations (the Presidium regularly hosts university interns and visits by groups contacted by the Slow Food association), the creation of a new event exclusively dedicated to the Salina caper and a tourism initiative associated with its production.
Values on the agri-environmental scale were already high at T_0, and have not grown significantly. This is partly because the caper is a very hardy bush and has always been sustainably managed or harvested from the wild.
The considerable increase in economic sustainability is due to an increase in areas cultivated (almost doubled), and a threefold increase in yields (from 25,000 to 85,000 kg per year), a result of improved management and the new independence of producers selling directly from their farms, at fairs or internationally (capers were previously sold and commercialized using intermediaries). The number of producers has also risen (from 3 to 6) and they have revived the gathering and salting of capers (once again profitable), processing facilities have been improved and new commercial channels developed through a strong link with a network of chefs (the Alliance Between Chefs and Slow Food Presidia). The chefs are keen to use this product because of its versatility, ease and efficiency of shipment.

Ustica Lentil – Sicily, Italy — Presidium launch date 2000

These tiny lentils grow on the fertile volcanic soil of the island of Ustica. Dark brown, tender and flavorful, they do not need to be soaked and cook in just 45 minutes.

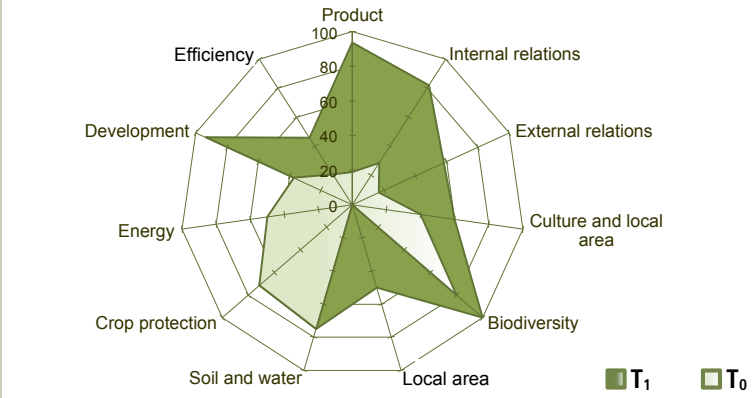


The components of all three scales are growing considerably, particularly the *defense of cultivations, soil and water* (agri-environmental scale) and *development* and *internal* and *external relations* (sociocultural scale).

Sociocultural sustainability has been boosted by improvements in several areas. There has been an impressive involvement of young people (4 farms out of 6 are managed by producers under 35 years), and women (2 out of 6) and relations between producers have improved due to managing shared issues collectively and, in recent years, the creation of an association. The visibility of the product has increased due to attendance at various events and the Presidium has established strong links with local bodies that have helped producers to improve their equipment (the regional authority has provided a threshing machine for shared use on the basis of a free loan).
Agri-environmental sustainability was already high at T_0 and it has risen further due to the introduction of cold treatments against weevils (post-harvest chemical treatments were previously used) and the adoption of organic practices by all producers. In addition, the farmers have recovered a lot of uncultivated land.
The growth in economic sustainability is due to a larger number of producers (from 3 to 6) and an increase in the quantities produced (from 1,000 to 20,000 kg). The cultivation of lentils is now an important source of income for people wanting to be farmers on Ustica and it is also a tourist attraction: All the restaurants offer it on their menus and food shops sell it. The negotiating power of producers has improved as they now sell all their product directly to consumers; the sale price has doubled.

Madonie Manna – Sicily, Italy — Presidium launch date 2002

Manna is obtained from a resinous substance extracted from the bark of ash trees in Castelbuono and Pollina, which dries rapidly to form white tubes. It is used as a natural sweetener and has very low glucose and fructose content.

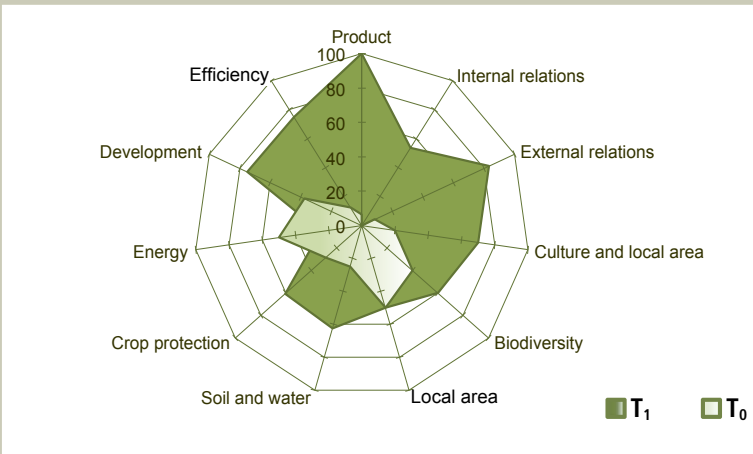


Nearly all components are improving, particularly those linked to the sociocultural scale (*product use*, *internal relations*). The agri-environmental scale began at a very high level.

The positive results for sociocultural sustainability can be attributed to improved harvesting. New practices have been adopted to improve manna purity and quality: at one time the manna was collected as it flowed down the tree bark (collecting various impurities), while now metal wires are hung from the branches, around which a tube of pure manna forms. The group has been taught the new method by a producer. The number of young people involved in all phases of production has increased (7 producers out of 10 are under 35 years), a producer association has been created and established stronger relationships with other bodies (national and international, Slow Food and non-Slow Food).
Agri-environmental sustainability was already very high initially and has remained unchanged through good management of the ash trees. The growth in the number of producers (from 4 to 10) and quantities produced (from about 100 kg per year to 450 kg), the expansion of some units and identifying new commercial channels have helped to significantly improve sustainability on the economic scale. Before the Presidium, 90% of the product was stockpiled at a price established by institutions; the price is now fixed by market supply and demand. Prices have also increased due to the significant improvement in quality.

Valle Bronda Ramassin – Piedmont, Italy — Presidium launch date 2007

Many people in Piedmont are familiar with this small, dark and very sweet plum, but it is relatively unknown in other regions of Italy. It is a traditional fruit that was typically found along the borders of family orchards.



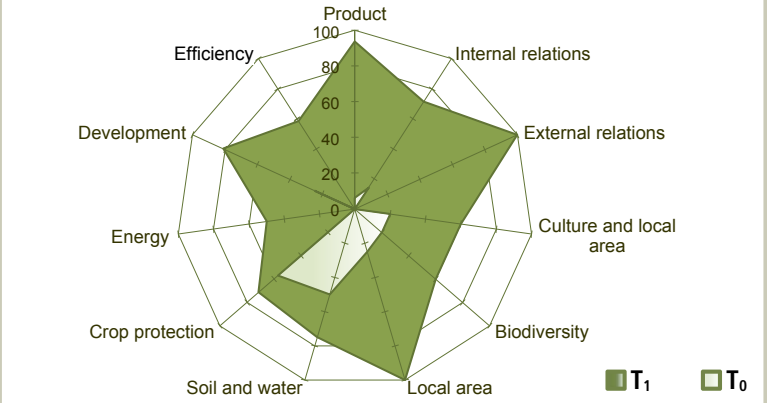
The most significant improvements are found in the components of *development*, *efficiency* (economic scale), *product* (sociocultural scale).

Values on the sociocultural scale have greatly improved due to increased value adding -the ramassin plums are now processed into jams and spirits - as well as for considerable strengthening of external and internal relations, boosted by continuous discussions within the consortium. Producers now make collective decisions, particularly to manage promotion, and this type of interaction was almost non-existent at T_0. There is also involvement of women in crucial roles (two producers out of six are women).
Components on the agri-environmental scale, though positive, have suffered from only partial adoption of organic agriculture

management systems and the use of non-sustainable materials for packaging (ramassin plums are packaged in PET containers). However this is connected to new commercial agreements with a large chain to secure new national markets and the need to guarantee longer preservation, and has resulted in improvements to economic sustainability. In the past the Presidium product was delivered loose to local wholesalers who purchased it at very low prices (when the market was falling), but now producers sell directly to large retailers through a distributor who guarantees a minimum price. The overall return is much higher than in the past.

Pozegaca Plum Slatko – Bosnia and Herzegovina — Presidium launch date 2004

Throughout the western Balkans, women produce a typical preserve called slatko, meaning "sweet". In the Upper Drina Valley the main ingredient is plums from old orchards of the native Pozegaca variety, which have now been revived.



Important growth of all components on all three scales, in particular *product use*, *external relations* (sociocultural scale) and *local area* (agri-environmental scale).

Values on the sociocultural scale have improved significantly for a number of reasons: the women involved - who previously produced slatko at home for family consumption - have formed an association; the production quality has increased through the introduction of control instruments that guarantee constant quality (refractometer, cold storage etc.); the producers have attended training courses and subsequently travelled to give training and advice to other women; and they have established relations with public bodies (such as the Ustikolina local authority) and private bodies (such as Coop Switzerland). The producers have also joined the Slow Food network and have played an active role in setting up the Goradze Convivium, promoting a festival for local products and establishing relations with producers in other countries (particularly Italy and Macedonia).

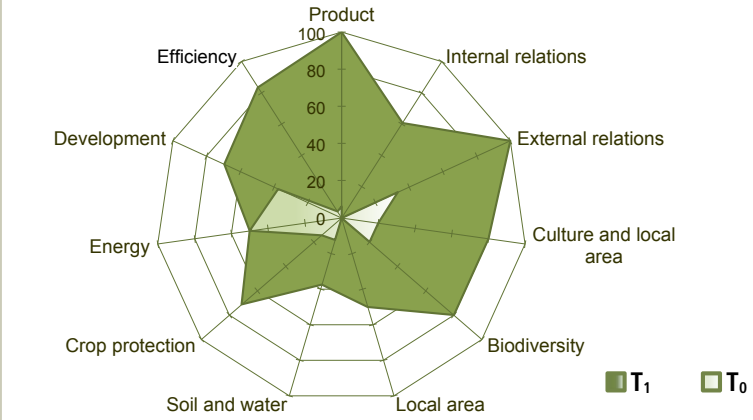
Regarding the agri-environmental scale, valuable work has been carried out to recover traditional plum orchards which were abandoned during the years of conflict before the Presidium was created.

Values on the economic scale have risen as a result of an increase in both the volume of product (from an initial 500 jars for self-consumption in 2004 to 3,000 in 2012) and the number of producers (the Presidium started with 3 women and now involves 11); the sale of slatko on the local and national market; and an improvement in processing facilities (the association has renovated an abandoned building in the centre of town and set it up as workshop for processing slatko and other preserves).

Pozegaca Plum Slatko – © Slow Food Archive

Georgian Wine in Jars – Georgia — Presidium launch date 2008

Georgia is one of the places where grapevines were domesticated. Its traditional wines vary according to the area, vinification methods and the vast variety of native grapes, but they all share a distinctive method of fermentation and aging in jars. These large terracotta jars are produced by local artisans and buried in the earth, placed in a cellar or left in the open.

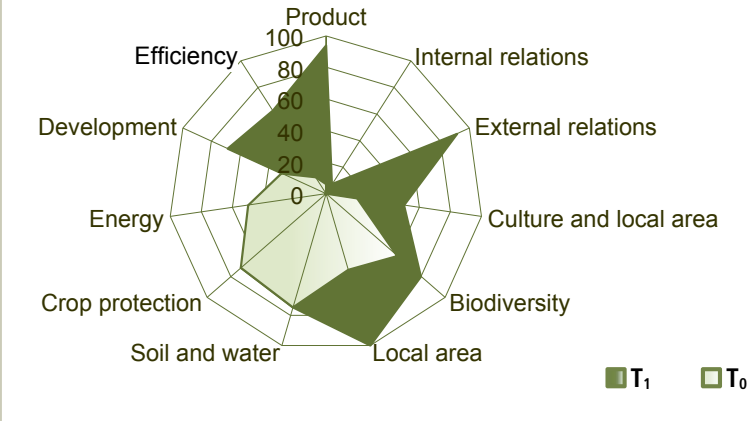


Growth is shown particularly in the components on the sociocultural scale (*product use* and *external relations*). There is an increase, though more moderated, of the components *efficiency* and *development* (economic scale).

Indicators on the sociocultural scale have improved significantly. The wine, which was previously produced solely for family consumption or informal sale in small quantities, is now bottled, labelled and sold on the market. The Presidium has enabled a producer association to be formed and various training activities have been held, enabling winegrowing and winemaking operations to be improved. The production of jars has also been supported, as this activity risked disappearing (the method also extends to artisan production of large terracotta jars). Values on the agri-environmental scale have increased markedly due to the protection of native vines, the recovery of abandoned vineyards and complete elimination of chemical treatments for crop protection and weed control. On the economic scale, the number of producers has only increased slightly (from 8 to 11), but facilities for winemaking and bottling have improved, new commercial outlets have been found (Presidium wine is now known and in demand in specialist shops and restaurants) and there has been a considerable increase in the sale price. These factors have contributed significantly to the rise in economic sustainability.

Ballobar Caper – Spain — Presidium launch date 2007

The old tradition of gathering wild capers in Ballobar was abandoned in the 1980s due to competition from capers imported from Andalusia and North Africa, but fortunately it has been revived in recent years.



Important growth of the sociocutural scale (in particular *product use*, *external relations*) and economic scale (*efficiency* and *development*). The *local area* component (agri-environmental scale) reaches the maximum score.

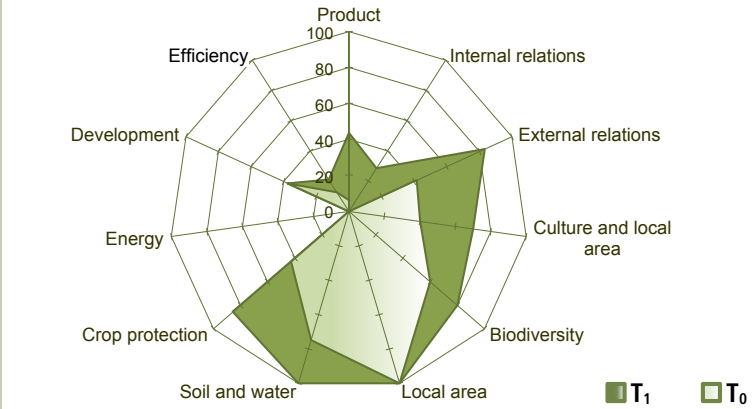
This product grows wild and environmental sustainability has remained unchanged from T_0 to T_1. Sociocultural sustainability has increased considerably through the creation of a product label and in particular through establishing new relationships and networks: with gatherers, institutions and restaurants (top Spanish chefs such as Basque chef Martin Berasategui have purchased the product).

On the economic scale, the development component has risen due to fitting out a processing workshop and increasing the production quantity (from 20 kg to 350 kg) and the "efficiency" component has improved through market diversifica-

tion (sales were initially only to the local area and now 70% of the product is sold nationally). However it has not been positively affected by the number of producers (which remains unchanged).

Smilyan Beans – Bulgaria — Presidium launch date 2009

A small resilient mountain community has grown Smilyan beans in the upper Arda valley for 250 years. There are two types of bean: a smaller brown variety with black streaks (dreben), and a larger white or purple bean with streaks (fasulitsa).

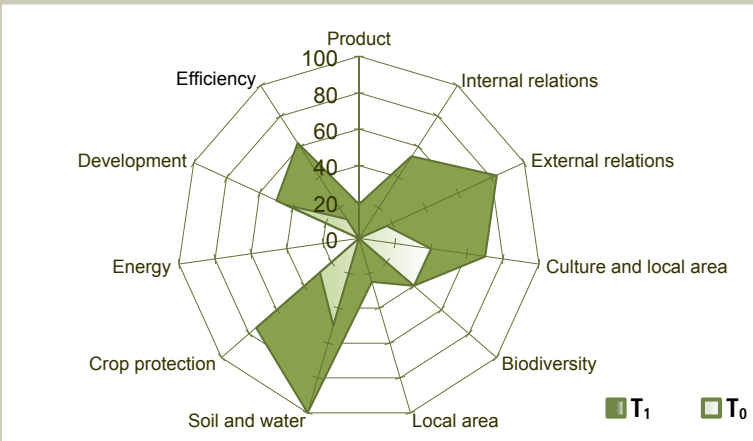


Discreet growth in sociocultural scale (in particular *external relations*) and agri-environmental scale (in particular the *soil* component and *crop protection*)

Values on the agri-environmental scale have not changed significantly because the initial situation was already very positive, due to the sustainable cultivation methods used, including crop rotation, intercropping and organic management. Values on the sociocultural scale have risen due to some training activities for producers and exchanges (particularly with the Gialèt Bean Presidium in Veneto), participation in various international events (such as Terra Madre Balkans and Eurogusto in Tours, France), preservation improvements (the beans are refrigerated to prevent weevil infestation) and expanded consumption (the Presidium organizes the annual Festival of Smilyan Beans). Values on the economic scale are more or less unchanged.

Santo Stefano di Sessanio Lentil – Abruzzo, Italy — Presidium launch date 2004

Small, tender and dark brown in color, this lentil grows only on the slopes of Gran Sasso above 1,000 meters. The long severe winters, short cool springs and poor chalky soils provide ideal conditions for this variety.



The components that are growing the most are *efficiency* (economic scale), *internal relations* (sociocultural scale) and *defense of cultivation*, *soil and water* (agri-environmental scale).

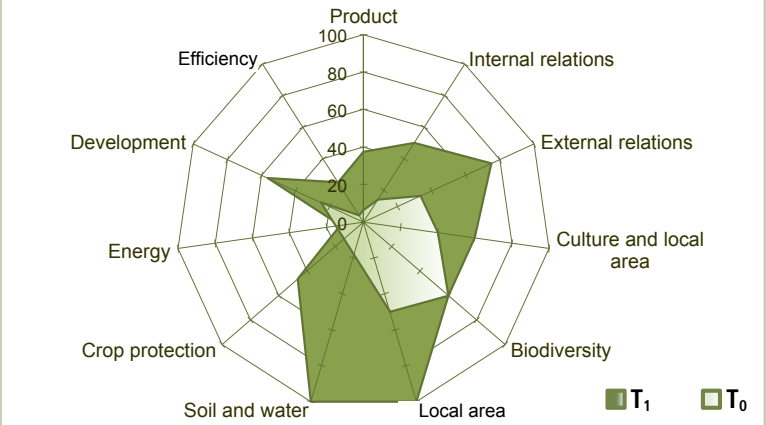
Growth on the sociocultural scale is due to greater consumer awareness of the product through producers attending various events, and activities carried out by the Gran Sasso National Park, which has introduced many training and promotional initiatives. The creation of a producer association and strengthening of relations with the Slow Food network and consumers has also played an important role.

On the agri-environmental scale, changes carried out to develop more sustainable practices at each stage of processing are important. Particularly relevant is a greater focus on natural methods of weed control and high sustainability post-harvest treatments (cold treatments or natural drying). Other positive measures include the introduction of varietal fields for shared

reproduction of seeds and efforts to maintain purity by using individual packaging (in the past lentils were mainly sold in bulk). On the economic scale, quantities have increased (from 9,000 kg to 15,000 kg) while the number of producers has dropped slightly from 13 to 12. New commercial channels – all the producers now sell directly, securing higher earnings, while previously the Presidium used intermediaries – and an increase in sale price has helped to boost economic efficiency.

Biancoperla Corn – Veneto, Italy — Presidium launch date 2002

Cultivation of this corn variety from the Polesine and Treviso areas dropped due to its low yields. It has tapered cobs with large pearl-white kernels.



Some of the components of the sociocultural scale show signs of growth (in particular *external relations*); on the economic scale only the *development* component is rising. There is a net improvement, however, on the agri-environmental scale, where some of the components are reaching their maximum level (*soil and water*, *local area*).

Sociocultural sustainability has increased due to the significant improvement in relations between producers, who have created an association, meet regularly and take turn in attending various types of events (markets, festivals) organized by Slow Food and others. Great progress has also been achieved with product quality and preservation, which was neglected in the past by some producers with adverse effects on quality and safety/hygiene risks. In particular, artificial drying has been introduced.

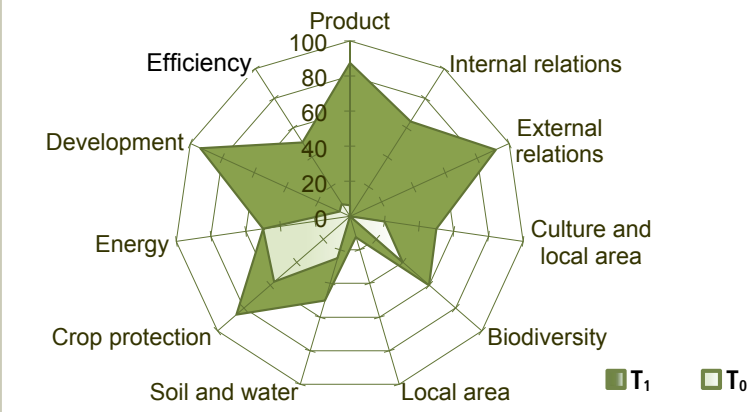
On the agri-environmental scale, significant improvements are due to various factors. Most importantly, producers have concluded the work to recover a traditional corn seed started by the Strampelli Institute in Lonigo and brought a forgotten cereal back to the market. In recent years they have selected 4 ecotypes from the 22 initial populations, stabilized them and are now trying to register them. The production rules have established various technical standards to be followed, with improvements for soil management, fertilization, rotations and crop protection. Two producers decided to convert to organic production. Some have also started producing energy from renewable sources.

On the economic scale, the number of producers has grown (from 9 to 12) and quantities increased (from 2,000 to 50,000 kg of grain per year). However these overall quantities are not so important for the farms: they have many other activities and only around 5% of cultivation is for biancoperla corn, it continues to provide only marginal supplementary income. This fact, together with the limited profitability due to the price, adversely affects the values on the economic scale.

Mais biancoperla – © Franco Tanel

Sibillini Mountains Pink Apples – Marche, Italy — Presidium launch date 2000

This heirloom variety has always been grown in the central Apennines. The apples are intensely aromatic and small with slightly squashed shape, pink skin and a very short stalk.

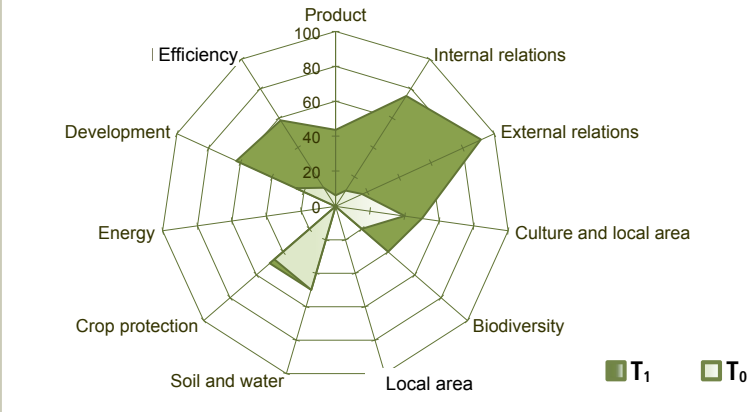


All components are growing, particularly those linked to the economic scale (with *development* reaching a peak) and those relative to the sociocultural scale (mainly the *product use* and *external relations*).

Sociocultural sustainability has grown as a result of some producers starting to process apples (for juices and jams), and expanded consumption due to Slow Food's promotional efforts. The role of young people is worth noting (20% of producers are under 35 years). The creation of an association has significantly strengthened relations between the producers. Pink apples are now a strong symbol of local identity for the Sibillini Mountains. Increases in values for agri-environmental sustainability are mainly associated with organic fertilization and the use of natural weed control methods. Economic sustainability has improved significantly due to three factors: cultivated areas have increased (from 4 to 20 hectares); the number of producers has grown (initially there were only owners of a few scattered trees, now there is an association of 15 producers who are also replanting new orchards); apples are no longer just sold at local level, from the orchard or at festivals but commercialized through large retailers using appropriate packaging.

Ferrandina Baked Olive– Basilicata, Italy — Presidium launch date 2004

Majatica olives, a native variety, are used for this product. Preparation involves first blanching, then dry salting and finally baking in an oven at around 50°C.



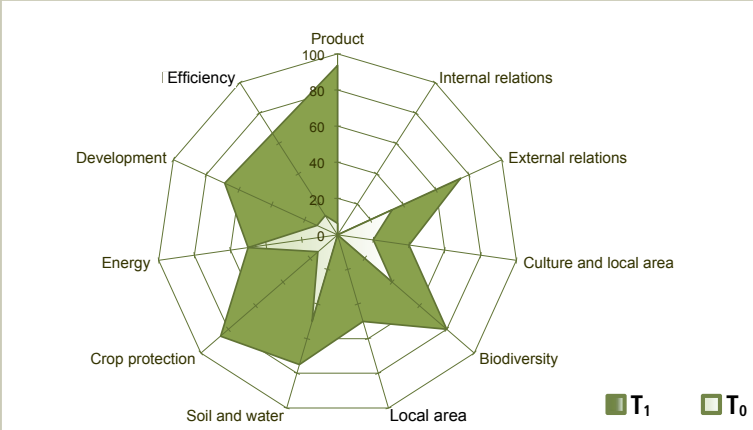
Some of the components on the sociocultural scale are showing significant growth (*internal* and *external relations*), as are some on the economic scale (*development* and *efficiency*).

One of the important components of the sociocultural scale is that the producers are aged between 30 and 40 years and 4 out of 5 are women. In addition they belong to an association and have regular meetings and have established excellent relations with local bodies, particularly the GAL (local action group) which has assisted them from the start.

Values on the agri-environmental scale have remained more or less steady, without significant improvements in the production and management of trees or environment. There has been a growth in the system's economic sustainability as a result of increased production (from 2,000 to 10,000 kg), which is now sold through diversified commercial channels (50% of production is sold in northern Italy and even Switzerland in large retail stores, specialized delicatessens, and pizza chains) and a higher sale price.

Torre Guaceto Fiaschetto Tomato – Puglia, Italy — Presidium launch date 2008

Around Brindisi everyone remembers the sweet and juicy Fiaschetto tomato, which has now returned thanks to the Presidium. It grows just a few hundred meters from the sea.



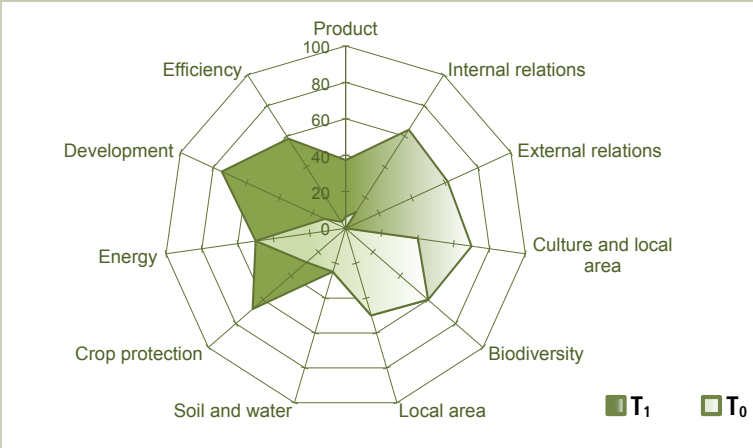
There is considerable growth of some components of the economic scale (*development and efficiency*) and of all components of the agri-environmental scale. On the sociocultural scale, excellent results in the *product use* component.

The sociocultural scale has recorded improved values due to greater diffusion of this heritage variety, which is available on the market in the form of high quality passata (tomato sauce). Relations between the Torre Guaceto Natural Reserve and local producers are excellent, thanks to the park's support for sustainable agriculture. Rural and cultural tourism involving agriculture and fishing has been developed in the area: various cultural initiatives, markets, farm visits and tastings are organized mainly in summer; and kiosks are set up on the beaches with food based on local organic produce, particularly Fiaschetto tomato. However the sociocultural scale is penalized by the poor relations between Presidium producers, who have difficulty in working together or involving other small-scale producers in the project.

On the other hand there are excellent agri-environmental results: before the Presidium was created, tomato growing involved significant use of chemicals, semi-hybrids and there was no crop rotation. Products are now exclusively organic, seeds are reproduced independently by the Presidium and crop rotation is practiced, allowing for the recovery of traditional local cereals as well. Values on the economic scale have grown due to an increase in quantities produced (from 35,000 to 75,000 kg), areas cultivated (from one hectare to two, four including areas under rotation) and market diversification (previously the Presidium producers only sold fresh tomatoes to wholesalers at unprofitable prices, they now sell 50% directly on national markets and as much as 30% online), increased sale price and greater product diversification (they now also sell dried tomatoes and passata).

Radìc di Mont – Friuli Venezia Giulia, Italy — Presidium launch date 2004

When the snows had receded, herders who had just brought up their flocks to the summer pastures would collect tender wild chicory. Even today keen foragers go up into the mountains in spring to gather this wild delicacy, which is preserved in oil.



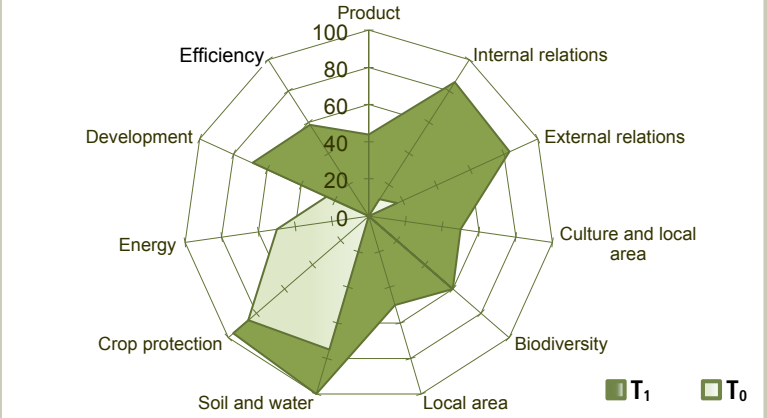
Slight growth of all components of all three scales. The values of the components on the agri-environmental scale were very high already in the beginning.

Sociocultural sustainability has mainly increased due to the creation of an association, which has brought the gatherers together. Values on the agri-environmental scale are unchanged. Radic (chicory) is a wild plant and there are regulations

pertaining to its harvest; the producers of processed products based on radic have agreed to specify the names of gatherers and the association has agreed to ensure careful harvesting of this wild plant. Producers meet regularly and discuss questions involving the Presidium. They are also trialing the cultivation of radic in order to decrease the pressure on wild populations. The quality of radic preserved in oil has also been significantly improved by using high quality extra virgin olive oil.

Civita di Cascia Roveja – Umbria, Italy — Presidium launch date 2005

Roveja is a small wild pea with a dark brown, reddish or dark green color. Though it has almost disappeared from the table, it is highly nutritious and an excellent ingredient in soups or made into flour.

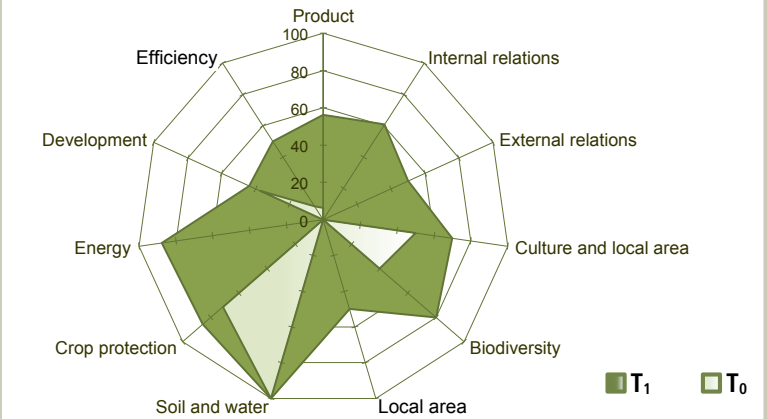


On the agri-environmental scale many components are showing significant growth, in particular *local area* and *biodiversity* which have reached remarkably high values, while the others (*energy*, *soil and water*, *defense of cultivation*) were already very good at the start.

All the indicators on the sociocultural scale have risen considerably. When the Presidium was created, Roveja was grown primarily in family vegetable gardens for self consumption and sometimes sold at small markets and village festivals. The recovery of roveja has supported the social and economic development of a small mountain village with few prospects, which was rebuilt after being devastated by the 1978 earthquake. Efforts to recover roveja are the work of the Civita women, true custodians of the product, who played a crucial role in its rediscovery. Young people are also reviving cultivation (one farm is owned by a young man). In moving from a family crop to a market product, roveja has managed to retain a high degree of agri-environmental sustainability: three producers out of four have gone organic. The substantial increase in economic sustainability has also been affected by the almost total absence of commercial activity at T_0. The number of producers has increased (from two to four), as have quantities (from 300 to 5,000 kg) and areas under cultivation, which risked abandonment (from two to seven hectares).

Lungau Tauern Rye – Austria — Presidium launch date 2009

It is an old variety of winter rye cultivated until the 1970s, it then almost disappeared. Fortunately some local small farmers had continued to grow the rye on small plots for their own consumption, saving the variety from being lost.



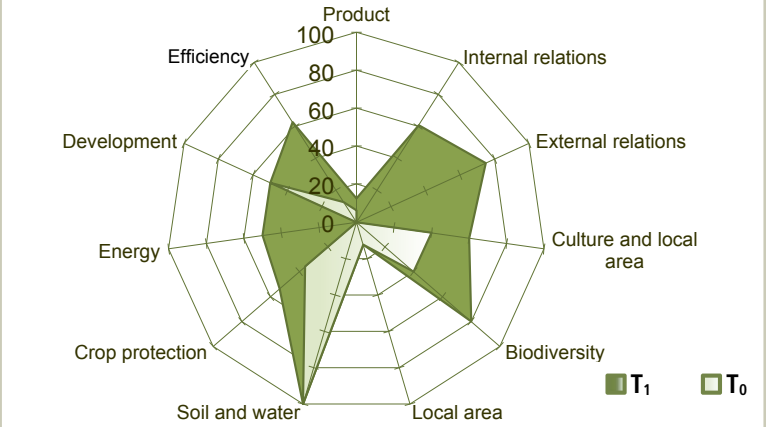
Strong growth on the agri-environmental scale (in particular for the components of *biodiversity* and *energy*) and on the sociocultural scale (in particular for the components *product use* and *internal relations*).

The greatest development was registered in the agri-environmental scale, as producers have focused their efforts on protecting and promoting this traditional variety of rye. They have obtained organic certification, introduced renewable energy

(photovoltaic) and biodegradable materials (paper) for packaging. The cultivation method, which was already sustainable at T_0, has not changed. Values for the sociocultural scale are also positive, thanks to work on the product (the processing method has improved as a result of introducing machinery - threshing machine and selection equipment – and new processed products, such as a rye beer, have been developed) and strengthening internal relations within the Presidium (producers have created an association and involve their children in the production process).
Economic values are not particularly encouraging (there has not been an increase either in the number of producers or area under cultivation) as it is not yet a priority for the Presidium, which is focusing first on a strong recovery of the variety.

San Gavino Monreale Saffron – Sardinia, Italy — Presidium launch date 2002

San Gavino Monreale saffron is bright red in color with a heady aroma and a strong flavor. The flowers are handpicked at dawn while still closed or only slightly open. The petals are opened and the stigmas removed before being rubbed with extra-virgin olive oil and left to dry.



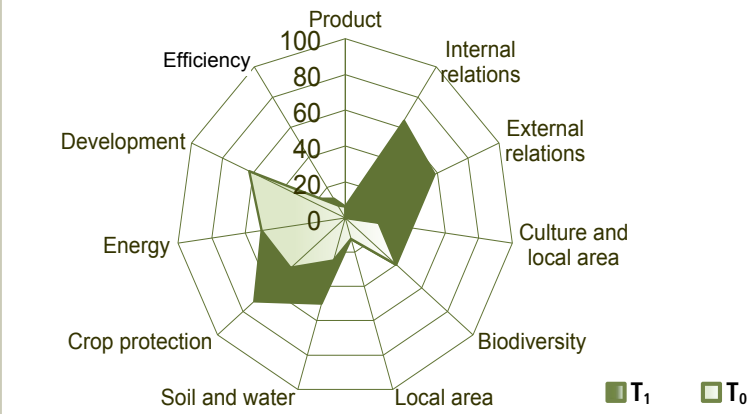
Good growth of the component *external relations* (sociocultural scale) *energy* (agro-environmental scale) and *efficiency* (economic scale)

Before creation of the Presidium, saffron was produced by household but very few producers had facilities that met the requirements for commercial production. In addition to encouraging the San Gavino Monreale area to recognize the value of the tradition, the Presidium has created an association bringing together producers keen to transform a small source of supplementary income into a possibility for development. Relations between producers have increased, partly because they need to agree about participation in many national and international events. A PDO project has also developed around the Presidium, which has extended to a larger area.
The adoption of a sustainable packaging system (glass containers or small terracotta containers handmade by local artisans), and improved crop-protection methods, have helped to increase values for agri-environmental sustainability. In the economic area, the reduced number of producers and areas cultivated with saffron has been compensated by stable production quantities, modernization of drying facilities, diversification of commercial channels and an increase in sale price.

San Gavino Monreale Saffron – © Slow Food Archive

Ljubitovica Garlic – Croatia — Presidium launch date 2000

Called luk in Croatian and cesnjak in Dalmatian, the Allium sativum garlic variety is conservable, full-flavored and fragrant, and often streaked with reddish veins. Grown by local families to supplement their incomes.

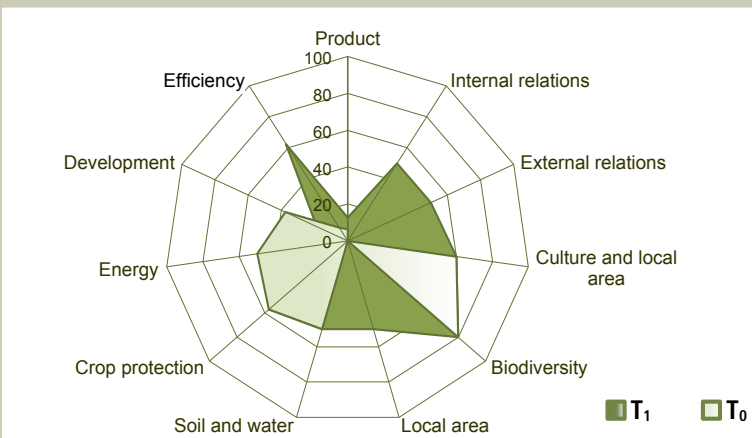


Only some of the components linked to the sociocultural and agri-environmental scales are evolving in a positive way.

The sociocultural scale has improved due to the creation of a producer association (which has a shared label used by the group of women and organizes an annual Festival of Garlic), and increased relations with local bodies and the Slow Food network. The introduction by some of the producers of rotation cropping and natural weed control methods are the only actions contributing, albeit to a limited extent, to the growth in agri-environmental sustainability. Finally the reduction in the number of producers and a significant fall in area cultivated, together with minimal price changes, have contributed significantly to a reduction in economic sustainability, which has not been offset by market diversification.

Albenga Violet Asparagus – Liguria, Italy — Presidium launch date 2000

With its unmistakeable large spears and deep purple color fading to cream towards its base, this unique variety is cultivated without the use of farm machinery



Few of the components show significant growth, apart from *biodiversity* (on the agri-environmental scale) and *efficiency* (economic scale).

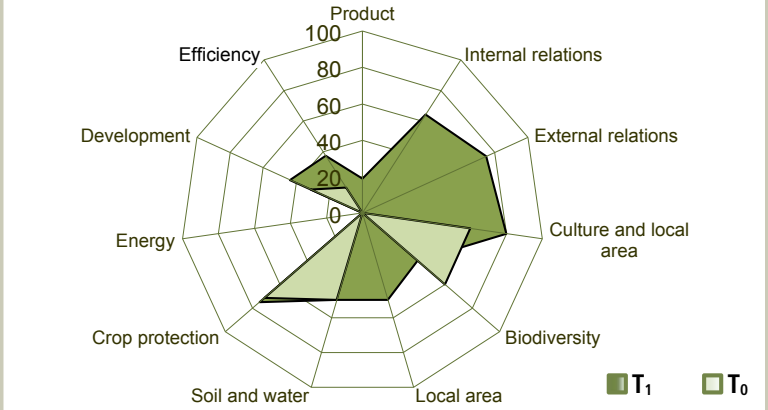
The sociocultural scale has recorded improvements at T_1: producers are enthusiastic, though an association has not yet been created and a young producer has recently joined the group. Without the Presidium the continuous loss of land planted with this product from the early 1900s to 2000 would have definitely resulted in the permanent loss of a unique vegetable, only averted in 1999 by the passion of a single farmer. Following creation of the Presidium, another four producers joined the project. Two producers left after several years, however they still benefit from the Presidium's successful promotion of violet asparagus (Albenga Violet Asparagus has been one of the most well-known Presidia for more than 10 years and enjoys considerable press coverage) that created a healthy market.

Values on the agri-environmental scale were reasonable from the beginning and have not recorded significant changes. A reduction in the number of producers compared to previous years (there are now three) contributed to a fall in the development component on the economic scale. The area cultivated has also not increased much: in this case the limit is due to urbanization on the Albenga plain, making it difficult to increase the area for food growing. The efficiency component has

improved due to development of new commercialization channels following partnerships with local fruit and vegetable cooperatives who commercialize the Presidium product, paying significantly more compared to the past 10 years. When the crop is harvested, all the local restaurants offer it on their menus. The negotiating power of growers has therefore considerably improved over time.

Carmignano Dried Fig – Tuscany, Italy **Presidium launch date 2001**

Immediately after harvesting the Dottato figs are split open and dried in the sun for 4-5 days. They are left for a month in a cool, dry place and then layered in figure-of-eight patterns with aniseed placed in between.



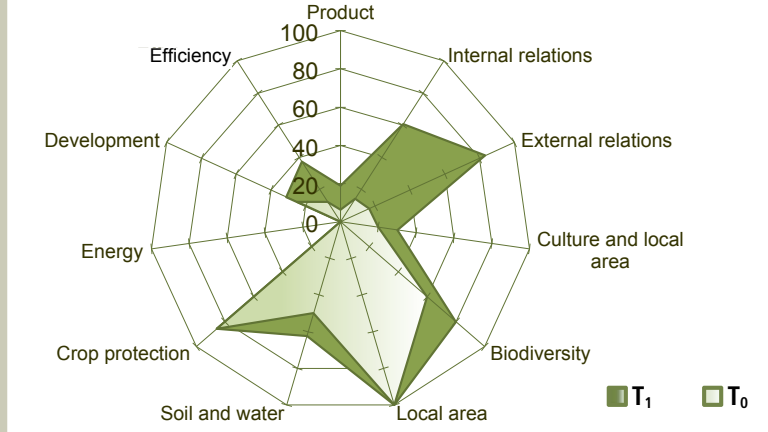
The principle growth is seen in the components of the sociocultural scale.

The sociocultural sustainability scale has recorded substantial progress: the Presidium has helped to improve relations between producers and the coordinator is now a person under 35 years. This product has received considerable press attention, with a successful festival created around it. Local bodies have financed the Presidium's promotional activities, recognizing its value for the local area. Values on the agri-environmental scale have remained unchanged: the only significant items are production diversification and organic fertilization.

The economic scale has been adversely affected by limits to areas cultivated (there has been a slight increase in fig plants from 2,000 to 2,300, and figs produced, 300 kg in 2000 compared to a current 1,300 kg) and the number of producers (they remain at 15, the same as when the Presidium was created), as well as the market remaining mainly local/regional with little increase in profitability.

Sorana Bean – Tuscany, Italy **Presidium launch date 2001**

This unusual variety of cannellini bean is small and tender with a squashed, almost flat shape. It is grown on a few hectares in a small valley in the province of Pistoia, on the banks of the Pescia River.



Solid growth of both the *internal* and *external relations* (on the sociocultural scale) and slight improvement of the components on the agri-environmental scale.

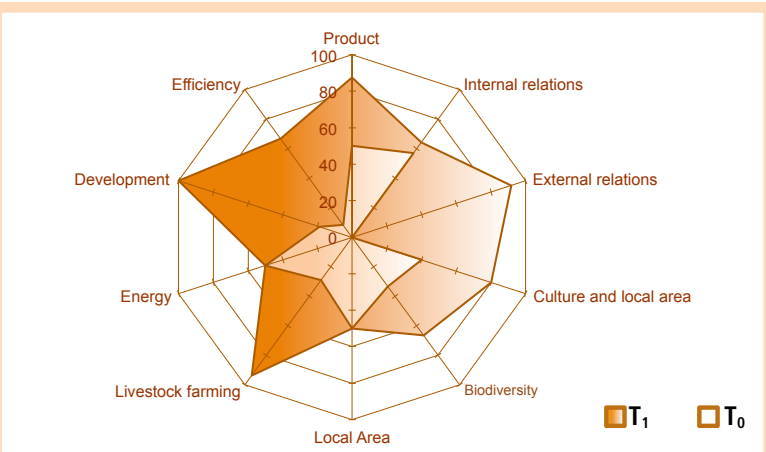
Only the agri-environmental sustainability scale is above the minimum threshold for a positive assessment. The sociocultural and economic scales remain below the threshold, though they do show an increase, more evident for the sociocultural scale, due to the creation of an association, relations between Presidium producers and the intense promotional activity at many local and national events organized by Slow Food.

The increase in quantities produced (from 4,000 to 7,500 kg) and in cultivated has been constrained because the PGI status (which the producers comply with so they can keep the name of their product), limits the maximum area per producer to one hectare. Identification of new commercial channels has helped to increase economic sustainability but due to a fall in the number of producers (slight from 4 to 3), it still remains very low.

The animal world

Sambucano Lamb – Piedmont, Italy **Presidium launch date 2000**

In 1985, there were barely 80 Sambucana sheep left in Piedmont's Stura Valley. The L'Escaroun consortium and the Lou Barmaset farming cooperative have since created a renaissance for the local breed and today there are around 4,000 head of sheep.



All components are growing very much, particularly *livestock farming* (agri-environmental scale) and *external relations* (sociocultural scale) and *development* (economic scale).

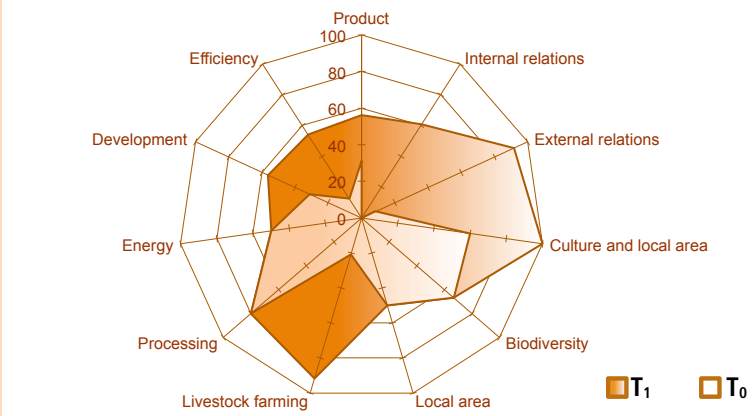
All three sustainability scales have risen significantly above the threshold level. Values on the sociocultural scale have doubled and increased three-fold on the economic scale. The main contributor to growth in sociocultural sustainability is external relations, with the producers participating in many events and establishing relationships and networks with Slow Food and consumers. There has also been a strong recovery of local identity linked to pastoral traditions (an attractive eco-museum dedicated to pastoral agriculture has been set up in Pontebernardo, there are many exchanges with similar groups of producers and training activities are organized with schools). Local restaurants have revived traditional recipes based on Sambucano lamb.

On the agri-environmental scale, it has not been necessary to make many changes to traditional practices as they were already highly sustainable. Small improvements have been made, with a prohibition on feed containing GMOs and a requirement to control crossbreeding to further reduce crossbreeds in flocks. Practically no packaging is used: Sambucano animals are sold whole and butchers create the portions as appropriate, using vacuum packing if needed.

There have been many improvements on the economic scale. Farms have constructed new sheds, new pastures have been introduced, the number of herders has increased (in the mid-1980s there were three, when the Escaroun consortium was created there were 10 members and now there are 60) and stock numbers increased (from the last remaining flock of only 80 animals there are now 5,000 in the upper Stura Valley), products diversified (a workshop has been built to make cheese using Sambucano sheep's milk and the wool is now processed), new commercial channels identified: at one time Sambucano lamb could only be found at local butchers, while now it is also available in a large retail chain, at Eataly, various butchers and local restaurants, as well as many Piedmontese restaurants belonging to the Alliance Between Chefs and Presidia, who offer it at attractive prices. The creation of the Lou Barmaset cooperative has been particularly successful: it slaughters the animals, guarantees traceability and sells the meat at good prices.

Aged Asiago – Veneto, Italy — Presidium launch date 2000

Aged Asiago is made in the mountains using milk from cows grazing on alpine pastures. The Presidium brings together a group of producers who only work with summer milk and produce an Asiago aged for at least 18 months.

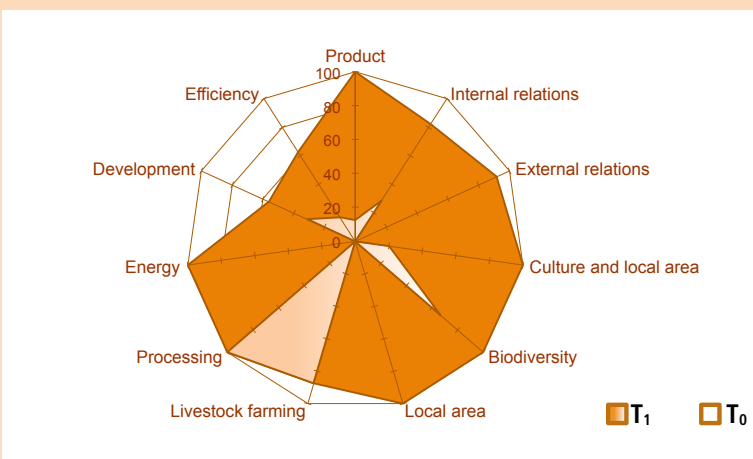


Important growth of the components on the sociocultural scale (*external relations*) and on the agri-environmental scale (*livestock farming*).

In the past 10 years of Presidium activity, Slow Food has highlighted the importance of protecting mountain pastures and reviving this cheese's traditional ageing, which is carried out for up to 18 months and was on the verge of disappearing in 2000. Producers have recognized the need to cooperate, meet and establish constructive relations with the PDO consortium (which was initially critical towards the Presidium) and learn more about traditional production. The Presidium has enabled links between the Asiago high country and dairy production to be strengthened, with Aged Asiago attracting the attention of national and international media. This has resulted in a threefold growth of sociocultural sustainability.
The agri-environmental scale has not recorded significant changes because, as with other mountain pasture products, the project was created to promote production methods that were already virtuous. Improvements mainly involve decisions by producers to ensure feed used to supplement grazing is GM-free.
On the economic scale, the number of producers has not changed much over the years, but product quantities have risen (now around 1,000 forms per year) and there has also been an expansion of farm facilities. Sale prices have increased, though there are not yet any commercial partnerships able to have a significant effect on economic sustainability.

Heritage Bitto – Lombardy, Italy — Presidium launch date 2003

The Presidium promotes production of Bitto cheese made in alpine meadows. It preserves a range of traditional practices, including the rearing of Orobica goats, rotational grazing, manual milking and the use of calècc, ancient stone huts serving as mountain dairies.



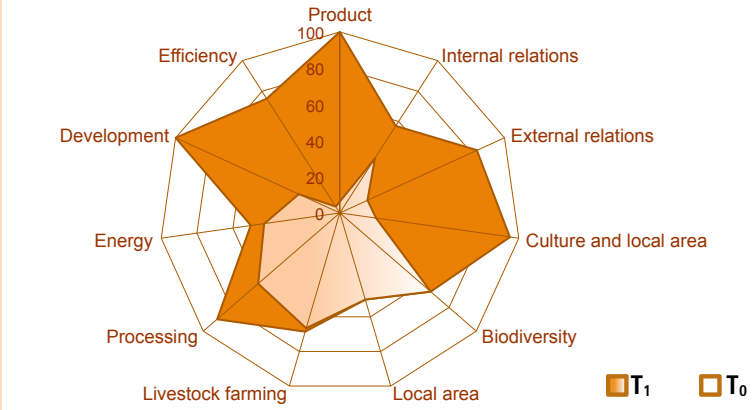
The performances of all components on all three scales are very high and reach, in the majority of cases, the maximum score.

The Presidium has recruited a significant number of young people to work on the mountain pastures: several children of producers have decided to remain on the farm and continue making cheese, including a young woman of 18 years. Extra-aged Bitto often wins awards. Relations between producers are very strong, due to many years of struggle by the Bitto Valleys association to assert the historical value of their cheese and the need to differentiate it from products in other

valleys which use milk from cows given feed. Ten years after the Presidium was created, the producers of Heritage Bitto enjoy a strong network of external relationships which supports them in commercialization and more. The members of the company managing the shared facilities for ageing Heritage Bitto also buy the cheese.
The components expressing agri-environmental sustainability have grown rapidly as a result of production rules which require traditional processing methods, natural grazing, meadow rotation, protection of native cow and goat breeds, and complete exclusion of rennet and supplementary feed on the pastures.
The main contributions to the economic sustainability scale come from creating a facility for shared ageing, to which producers send 50% of their production; acquiring independence in selling Bitto cheese (previously the Presidium producers sold to large dealers/refiners); qualitative improvements to the product (which is aged after careful selection of the best forms); and development of creative commercial options (purchasers of a Bitto form can request personalized branding, or can use the Presidium facility as a cheese bank, by buying a fresh form, leaving it to age and collecting it later or selling it back to the Presidium). The slight drop in the number of producers (16 to 14) is compensated by a rise in prices, which not only produces benefits from the price per kg, but also because the arrangement with shared ageing and a managing company (to which the cheesemakers association also belongs) means that producers receive worthwhile profits at the end of each year.

Euskal Txerria Pig – Spain — Presidium launch date 2004

The Euskal Txerria is the only surviving native pig breed of the Basque Country. With short legs, large hanging ears and black spots on their head and hindquarters, the comical looking pigs graze freely on acorns, chestnuts, hazelnuts and grass.

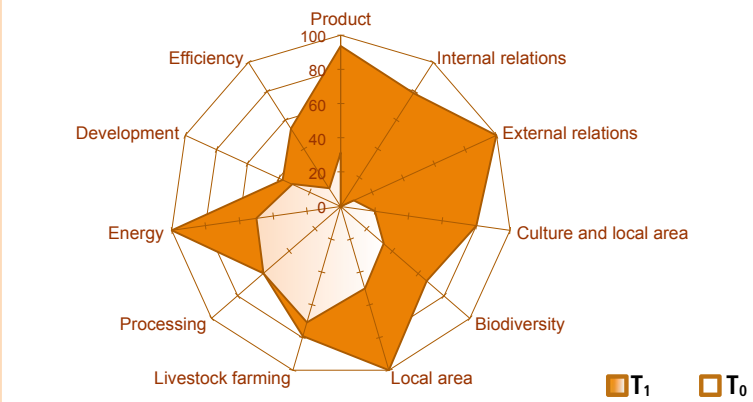


Considerable growth of almost all components on all three scales. Many of the components on the agri-environmental scale were already good at the outset of the Presidium.

Values affecting the sociocultural scale are extremely good, thanks to the significant progress made in recent years: four young people (under 35 years) have undertaken production; the Presidium enjoys excellent relations with local bodies and the Slow Food network (including other Presidia from whom it purchases raw materials such as Añana salt and Rimbas pepper), it takes part in numerous initiatives (national and international fairs, guided farm visits for schools and Associations of the Third Age, work experience for students from the University of Gastronomic Sciences etc.) and it now receives considerable media attention (features on the Euskal Txerria pig have appeared in the local, national and international press and on Spanish television). The producers have also renovated old structures (troughs, wells etc.) and transformed a small cellar into a tkoko (small bar) for visitors and product tastings. The Eskal Txerria is the only surviving Basque pig breed and work to recover it already began in 1997. The Presidium has continued and strengthened the work that was under way; it is also planned to promote a form of extensive farming (in the open, using a natural diet based on acorns, chestnuts, hazelnuts, grass, cereals). Values on the agri-environmental scale were therefore already high from the beginning. The energy component has improved further through using renewable sources (two producers have introduced photovoltaic) and the development of a common recycled packaging.
Many values on the economic scale have risen: the number of animals has increased (from 100 to 450) and also the number of producers (from 1 to 6); markets for the products have been diversified (it is now sold internationally, in specialized shops and large chains); and there have been various improvements to buildings (new sheds, aging facility, reception room for visits). There have not been improvements to price but it is already at an acceptable level (producers are suffering from increased prices for cereals).

Saras del Fen – Piedmont, Italy — Presidium launch date 2000

Saras means ricotta in local dialect. The tradition of wrapping this cheese in hay (or fen in Piedmontese) came from the need to transport it down from the pastures of the Pellice Valley.



There has been significant growth in the components on the sociocultural scale (above all the *internal* and *external relations* and *product use*) and in some of the components on the agri-environmental scale (*local area* and *energy*).

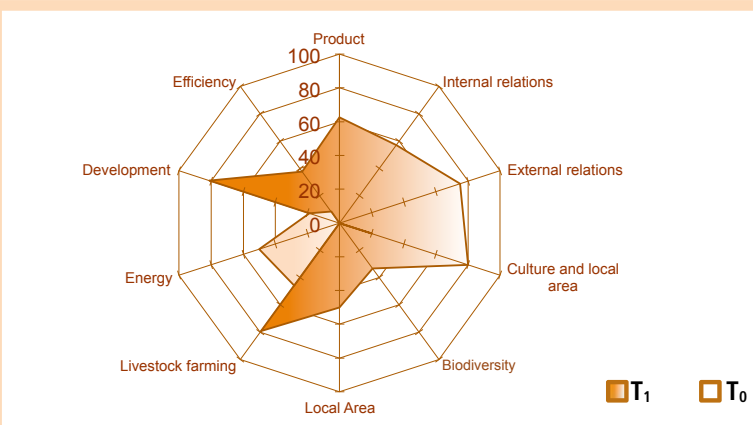
Sensory quality has improved due to more effective methods of preservation. Many young people have continued their parent's work; relations between producers have strengthened as a result of the Presidium and also the significant promotional work for local products carried out by the Turin Provincial Authority; the Presidium has its own association and a trademark. Relations with local bodies are also good, particularly with the local mountain community. All this has helped to improve sociocultural sustainability.

Agri-environmental sustainability has improved significantly due to the introduction of renewable energy systems (solar panels and photovoltaic systems in the mountains), continuation of transhumance and good management of herds during winter (when animals receive a good diet).

Although there has not been an increase in the number of animals or herders, new commercial channels have helped to significantly increase economic sustainability. Saras has particularly benefited from the creation of many producer markets and sale at Eataly, which has dedicated particular attention to local products from the Turin area and Piedmontese Presidia in general. This is perhaps one of the Presidia where the interactions between Slow Food, local public bodies, producer associations and marketing specialists have been most effective. The development of new ways of presenting Saras, particularly through the efforts of well-known chefs, has been of considerable benefit, and the cheese is now widely used around the province. Profitability has also improved.

Alpago Lamb – Veneto, Italy — Presidium launch date 2000

A small to medium sized native breed with no horns and tiny ears, Alpago lamb is raised free or semi-free range. The meat is extremely tender with just the right balance of fat and lean, and distinct notes of aromatic herbs.



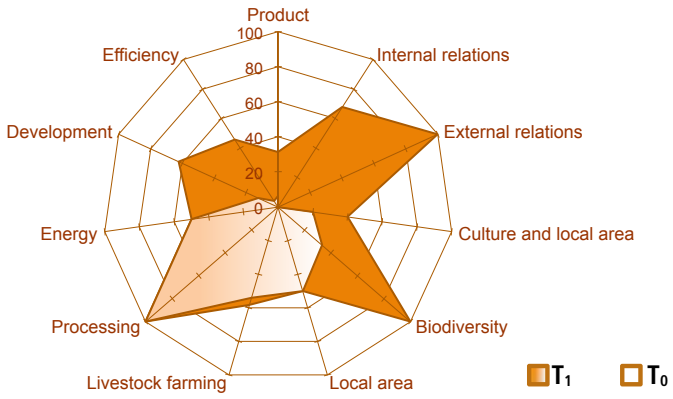
Important growth of the components on the sociocultural scale (above all *product use* and *external relations*); an interesting gain in the *livestock farming* component (agri-environmental scale)

Values on the sociocultural scale have increased due to diversification in the product's uses (clothing has been developed with Alpago wool) and a strengthening of internal relations between herders, who are united and work within the association, as well as benefits from wide-ranging external relations created by Slow Food with its international network and

network of the Alliance Between Chefs and Slow Food Presidia.
The use of pastoral farming and transhumance was a decisive factor in increasing agri-environmental sustainability, offsetting the negative effect of adopting low-sustainability packaging (non-biodegradable vacuum packed film).
The significant rise in economic sustainability was mainly due to market diversification: from being an exclusively local product around Alpago (a few towns near Belluno), communication work by well-known chefs enabled Alpago lamb to cross provincial boundaries, and is now recognized as one of the best lamb breeds in Italy. Promotional work has been excellent, with the lamb being used in Italian (and also international) restaurants. The organization of producers in the Fardjma Association, joined by chefs who have promoted the breed, has strengthened following the creation of a marketing cooperative. It has made agreements with a large number of retail outlets and is also promoting wool in collaboration with a traditional local wool mill.

Bucegi Mountains Branza de Burduf – Romania **Presidium launch date 2007**

This iconic Romanian cheese is made by re-processing cas, a fresh sheep's milk cheese. After fermentation the paste is placed in containers made from pine bark or pig bladders.

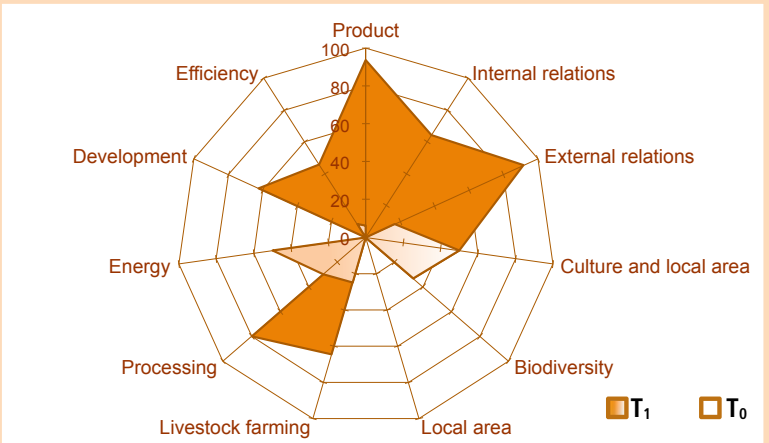


All components of all three scales show growth. In three cases the growth is particularly elevated: *processing*, *biodiversity* (agri-environmental scale), and *external relations* (sociocultural scale).

The initial situation for this mountain cheese was very complex because none of the producers met regulatory requirements for production or sale. Values on the sociocultural scale have improved substantially: there is now a group of producers who communicate and discuss with each other, receive technical assistance from veterinarians, and sell cheese under a shared label. A shared aging facility has been renovated (duly registered with the local health authority) and the Presidium has good relations with public bodies.
The initial agri-environmental situation was already good (due to the sustainable methods and natural animal diet), but it should also be noted that this Presidium plays an important role in protecting the habitat and mountain pasture dairy production (which risked disappearing in the whole of Romania). The facility used for aging was renovated by the Presidium coordinator and made available to everybody; it is partly built into the rock of the hillside and also made of stone, so it is in harmony with the landscape. On the economic scale, the number of producers has risen (thereby acquiring negotiating power which previously did not exist), the quantity of product has increased (from 3 tonnes to 7.5), but most importantly, Branza de Burduf is now a recognized product which can be sold legally, both on the local market and at national and international events.

Cilento Cacioricotta – Campania, Italy — Presidium launch date 2002

Cacioricotta is a unique cheese made from goat's milk that is produced in the Cilento area. Its name reflects the method for coagulating the milk: partly using rennet (characteristic of cheese or cacio) and partly using heat (characteristic of ricotta).

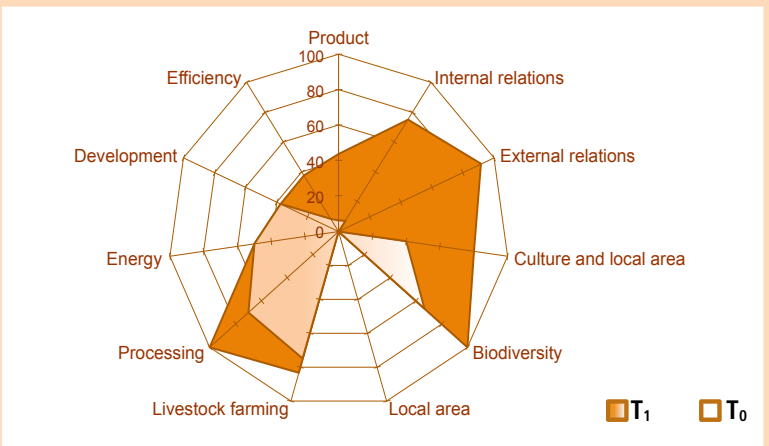


The components that show growth are those on the sociocultural scale (in particular *product use* and *external relations*). In a smaller amount, the components of *livestock farming* and *processing* (agri-environmental scale) also show growth.

The sociocultural scale has recorded extremely high values due to the strengthening of internal and external relations, and particularly due to diversification in end uses: in the past it was mainly used as a grating cheese, while now it is more often eaten fresh due to new forms of preservation (cold storage).
Progress in agri-environmental sustainability has been small but significant: one producer obtained organic certification and a second has applied for it; some producers are raising local Cilento goats; all only use feed when essential (when grazing is not possible), and it is GM-free. A negative factor is the use of vacuum packing, also for preserving the product.
Economic sustainability has improved significantly. Before the Presidium the cheese was a family product and there were no producers meeting regulatory standards able to supply the market: now the Presidium producers (increasing from 3 to 6) have a compliant workshop and ageing facilities. Quantities sold have increased considerably (from 0 to 21,000 pieces), with an expansion of sales channels (cacioricotta is sold throughout central and southern Italy, with some supply also to the north). However it is difficult to increase the size of flocks and pastures due to the limits imposed by the Cilento National Park.

Jämtland Cellar Matured Goat Cheese – Sweden — Presidium launch date 2007

A distinctive raw-milk goat cheese aged in old stone cellars, today it continues to be produced in a few pastures and farms in the mountainous area of central Sweden.



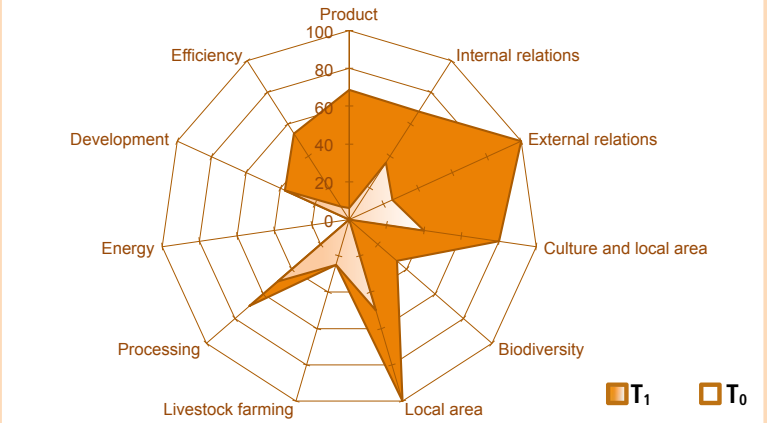
Important growth in the components on the sociocultural scale (in particular *external and internal relations*) and in those on the agri-environmental scale (in particular *livestock farming* and *processing*).

Cellar-matured goat cheese is a traditional product from central Sweden, but the number of producers and goats had fallen dramatically over the years. The Presidium was created to save this cheese from extinction and preserve its best version (made with milk from pasture animals and aged for at least 6 or 7 months in cellars).
The values on the sociocultural scale have improved due to a greater spread of consumption (now it is no longer limited to production areas, but can be found in some Stockholm restaurants), continuous dialogue between producers (though there

is not yet a formal association), numerous training initiatives (on processing raw milk and aging), excellent relations with institutions and local bodies (particularly the Swedish National Centre for Artisan Food, Eldrimmer), considerable attention from the media and participation of producers in numerous initiatives (national and international events, educational activities for schools).
Agri-environmental sustainability was already good at T_0 but this was a product at great risk of disappearing: the creation of a Presidium ensured its survival (and as well as the cheese, it is endeavoring to protect the Lantras Svensk goat breed, this type of pasture farming and cellar aging). Thanks to a regional project run by the Eldrimmer Centre, about 20 saeter (traditional mountain pasture farms) have been recovered. There have not been significant changes on the economic scale (same number of producers and same quantity produced), except for the price (more profitable for the producers) and greater market diversification (20% of the cheese, for example, is now sold in restaurants).

Zibello Culatello – Emilia Romagna, Italy — Presidium launch date 2001

Zibello Culatello is one of Italy's most highly-regarded cured meats, due to its long and delicate processing and the use of one of the most prized cuts of pork: the boned "nut" of the thigh.

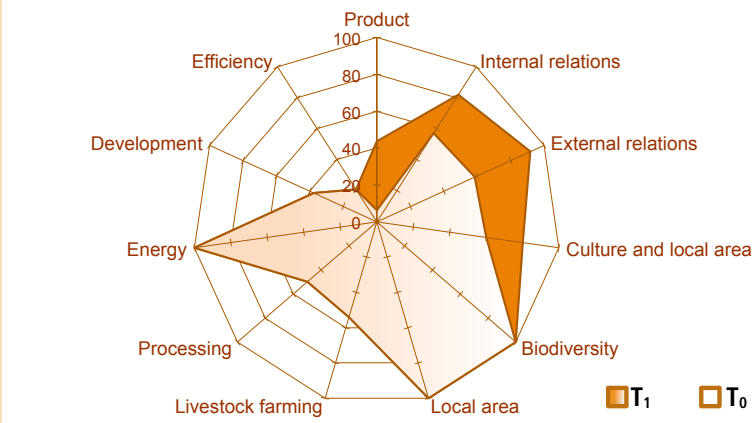


Strong growth on the sociocultural scale (*external relations*, *product use*). It reachs the maximum score on *local area* (agri-environmental scale)

All the components on the sociocultural scale at T_1 are above the threshold, with the highest values for strengthening of external and internal relations: the Presidium attends numerous events and the product is now known throughout the world as one of the top Italian delicacies. Great efforts have been made in recent years to differentiate traditional producers within PDO production (they are mainly industrial producers). Old people have played an essential role in confirming the traditional authentic method for making culatello, but now some young people (children of the producers) are taking up the activity. It is important to highlight the long ageing period (from 18 to 24 months), which must be strictly carried out in natural cellars without any climate control (this has also meant finding and refurbishing old farms in the traditional area) and reviving the traditional dimensions (from 3.5 to 4 kg, which is larger than the culatello usually sold by other producers who do not belong to the Presidium). This is an effort, investment and a risk that is necessary to recover the identity of such a prestigious traditional product.
On the agri-environmental scale, there has been an improvement in sourcing meat: importantly, butchers now purchase traceable GM-free meat; some producers are also becoming farmers and are trying out native breeds. One factor penalizing agri-environmental sustainability is the sale of portions of culatello on the market, with a consequent use of non-biodegradable packaging.
Progress in economic sustainability has been modest due to a reduction in the number of producers (from 13 to 6, because some did not adapt to the strict production rules) but is on balance positive: the quantity produced has increased (from 2000 to 4000 pieces per year), the market is now more diversified (for example, 60% of Presidium culatello is sold to restaurants).
There is a final unusual point of interest: the Presidium coordinator has frequently carried out free consultancy work, commissioned by the Slow Food Foundation for Biodiversity, to help other producers to improve their activities along the chain (from raising animals to processing) and each year organizes a dinner to raise funds for Slow Food projects in the global south.

Béarne High Pasture Cheeses – France — Presidium launch date 2008

Shepherds from the three valleys of Béarne lead their flocks of sheep to the mountain pastures on the French side of the Western Pyrenees, where they produce traditional tomes, pressed raw-milk cheeses which can weigh over five kilograms, in small stone huts.



Important growth in the components on the sociocultural scale (in particular *internal* and *external relations*, *culture and local area*).

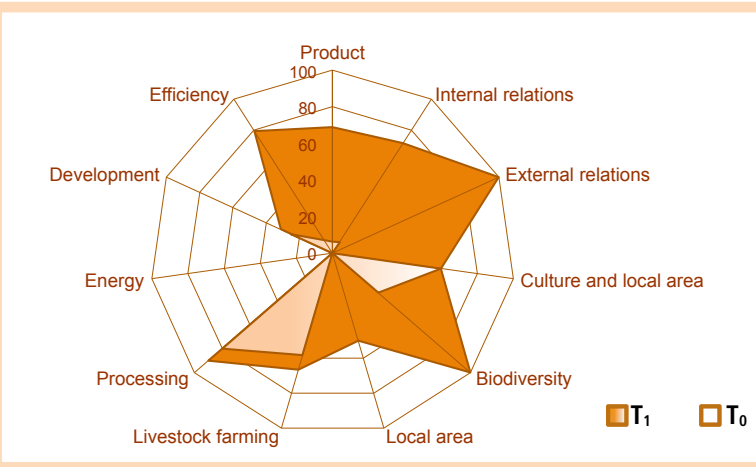
There are a number of positive components on the sociocultural scale: the significant role of younger producers (15 out of 50 are under 35 years) and women; training organized in recent years for cheesemakers; the role of the producer association, which has become increasingly important and recognized by local institutions and other associations (such as the EHA, the association of Basque herders); participation in various events; creation of a shared trademark, which has achieved a reputation with consumers.

On the agri-environmental scale, initial sustainability was very high due to the work supporting native breeds and the mountain pastures, and the use of renewable energy (all the pastures have solar panels). The weak points of the agri-environmental performance are the use of corn silage for pregnant animals (which will gradually be eliminated) and the use of purchased rennet (work is under way to replace it with self-produced milk starter culture).

No significant progress has been made on the economic level (no changes in the number of producers, quantities produced, or sale prices), except for greater market diversification (it is now possible to find Béarne cheeses in some Paris restaurants and small quantities have been sold to other countries through the Slow Food network).

Aged Artisanal Gouda – Netherlands — Presidium launch date 2003

Artisan Gouda is dense, sweet and yellow. When made to high standards it has a persistent aftertaste, with slight acidity but full caramel flavor. The Presidium supports the production of gouda aged for at least two years.



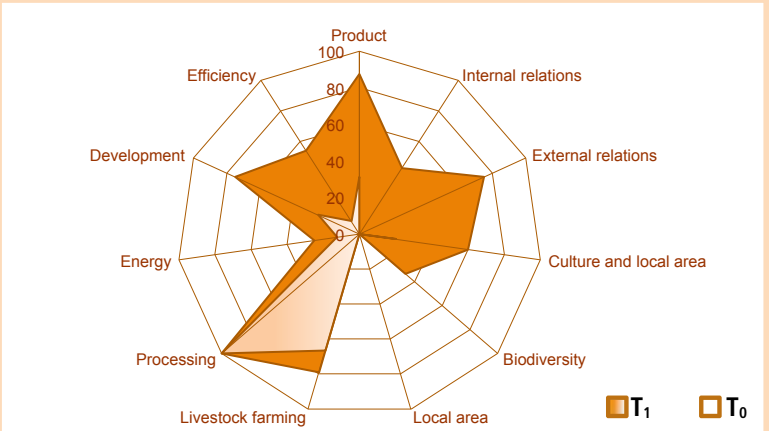
Important growth of the components on the sociocultural scale (in particular *internal* and *external relations*) and in some of the components on the agri-environmental scale (*biodiversity*).

The initial situation of this Presidium was unusual. Gouda is an extremely well known name on the international market, but it is associated with products of very low quality. The Presidium was created to recover the authentic version of a cheese with a great tradition, which had been downgraded by industrial standardization. From the start there was therefore rigorous attention to every stage in the chain from processing to aging (Presidium cheese is aged for a minimum 20 months). Values on the sociocultural scale are accordingly high, partly due to particular effort to ensure good communication: aged

artisanal Gouda, which had previously been ignored by the media, is now being featured by journalists from around the world; producers have become ambassadors of real Gouda, and also of Dutch raw milk cheese in general. The Presidium has established relations with various bodies (for example the University of Wageningen) and created a single label.
On the agri-environmental scale, the action to protect the habitat should be noted: by only including summer production in the Presidium, the project safeguards and supports the peat pastures (poiders), which were seriously threatened by urban expansion. On the economic scale there has been an increase in prices and market diversification (20% of the product goes to the international market), but there has been a further reduction in the already small number of producers. The Presidium's top priority in the near future must be to turn this round.

Marzolina – Lazio, Italy — Presidium launch date 2000

This small cylindrical cheese was once only produced in March, when goats had just started to produce milk, hence it gets its name from marzo, "March" in Italian.



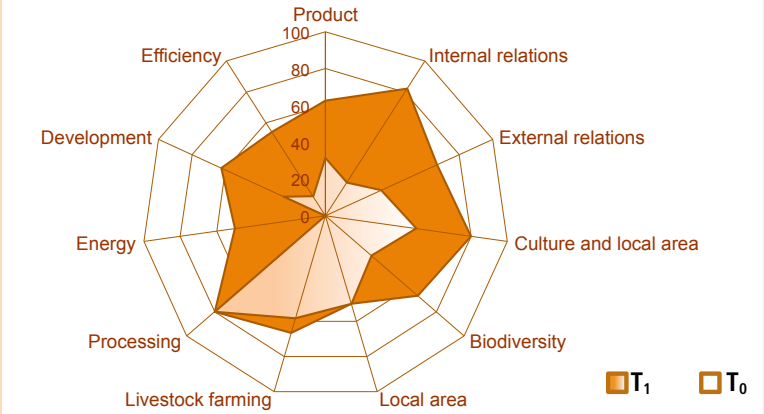
Discreet growth in nearly all the components, with three that show significant growth: the *development* component (economic scale) and the components of *product use* and *external relations* (sociocultural scale).

The Marzolina Presidium was set up in a marginal area of the Frosinone district, near the Abruzzo National Park, where this cheese was once produced by all local farming families. However the two current producers did not have connections with the traditional product or previous knowledge of processing methods. They were both around 30 years old when the Presidium was started 10 years ago. The sociocultural scale is therefore positive mainly for the importance of reviving a traditional product, but also for the good relations the Presidium has managed to establish with external bodies (one of the two producers plays a significant political role in farmers' associations). But internal relations could be better: there are problems due to the geographical distances. There has been significant participation in events, which is considerably improving communication between producers, relations with consumers, knowledge and availability of the product (Marzolina has even been included on the menu for the current President of the Italian Republic).
The agri-environmental scale is penalized by the use of plastic non-biogradable containers and vacuum packing for preserving the product. The economic scale has been boosted by an expansion of facilities (one of the two producers has built a new workshop), an increase in quantities produced (from a product only for family use it now enjoys a significant market: one of the producers supplies 10,000 pieces per year and the other 4,000) and animals farmed (the number of goats has doubled). In addition new commercial channels have been developed and there has been considerable growth in selling prices: Marzolina, which was previously unknown outside the local area, is now sold in the best delicatessens in Rome, at Eataly, in producer markets, national and international events.

Marzolina – © Alberto Peroli

Pistoia Mountain Pecorino – Tuscany, Italy — Presidium launch date 2000

In the mountains around Pistoia, some families of shepherds and cheesemakers still make pecorino like it was done a century ago, using raw milk and natural rennet. Their herds of Massese sheep, a local breed with shiny black fleece and dark spiraled horns, are grazed on mountain pastures.



Strong growth in all components, in particular *internal* and *external relations* (sociocultural scale), *development* (economic scale) and *energy* (agri-environmental scale).

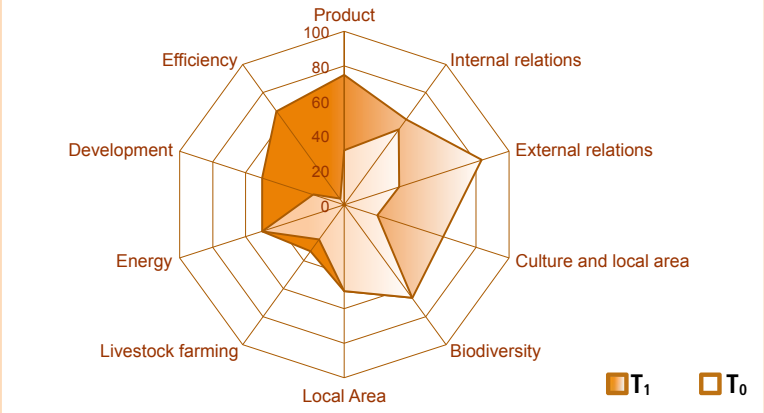
The progress in overall sustainability is evident. The economic and the sociocultural scale have doubled their levels while the agri-environmental scale has made less progress, partly because it already started from a good position. The Presidium has maintained the initial situation and also undertaken initiatives to protect biodiversity and develop renewable energy systems by installing solar panels on the roofs of many sheds.

Some firm decisions need to be taken regarding animal diet and cheese production. On the sociocultural scale, the introduction of new processing methods has helped diversify the product and the entry of new young producers has enabled better organization and boosted external relations. The president and vice president of the consortium for herders and producers of Pistoia Pecorino are both women, which is unusual in the sector.

On the economic scale, increases in land area (from 2,000 to 2,500 hectares), production quantities (from 1,000 to 1,400 tons) and farm expansion, particularly new sheds and dairies, have helped to significantly increase sustainability. It has also benefited from greater market diversification: previously 80% of the market was local, and national and in particular has managed to enter the restaurant market with 20% of production. The negotiating power of producers has also increased.

Gascon Chicken – France — Presidium launch date 2008

Elegant in its black plumage speckled with slaty blue feathers, the Gascon chicken has always been a highly regarded bird in the farmyards of Southwestern France.



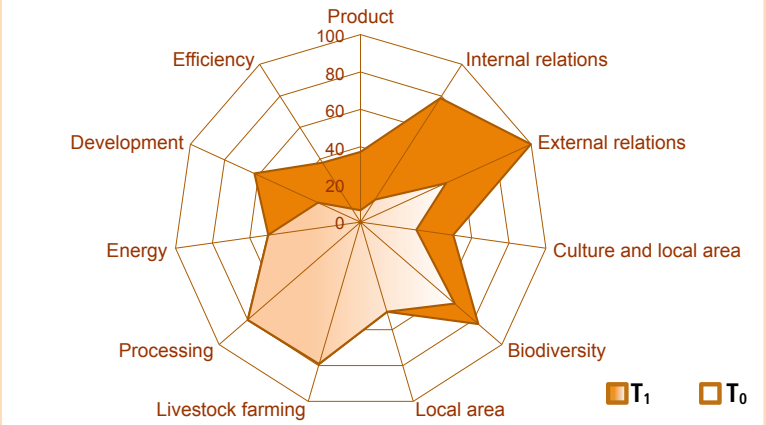
Growth of all of the components, in particular *efficiency* (economic scale), *external relations* and *product use* (sociocultural scale).

Values on the sociocultural scale have improved due to the work promoting the quality of Gascon Chicken (a result of the breed's characteristics and high-quality diet), development of new processed products (chicken in jelly, patè, salsa poluarde supreme), a spread in consumption (it now appears on the menus of some restaurants in Toulouse and Paris), training initiatives (on the management of production stages), relations established with public institutions (Conseil Gènéral du

Gers et des Haut Pyrénées and Région Midi-Pyrénées) and the Slow Food network (the local convivium organizes Taste Workshops and educational initiatives for schools about this breed) and media attention received (good coverage of the Presidium in local newspapers, regional and national television). A crucial promotional role has been played by an artisan who manages a specialist shop (Xavier Abadie) and a restaurateur (Philippe Pitton).
The values on the agri-environmental scale have remained substantially unchanged: They were already good at the start, thanks to the sustainable methods used, but there is room for improvement in dietary quality and animal welfare. The most significant factor here is the large number of initiatives to protect the breed, in collaboration with the Bèchanne Centre for Selection, the St Christophe Institute and the Auzeville agricultural high school.
The greatest increase has been in economic sustainability. This is due to a threefold increase in the number of birds (from 2,100 to 6,000), better sales management (now managed by the Presidium collectively) and market diversification (more than 50% of the product is sold at fairs, restaurants and school canteens).

Casentino Prosciutto – Toscana, Italy **Presidium launch date 2002**

The Presidium has revived the ancient Casentino tradition of making prosciutto from the meat of Casentino grey pigs raised in a semi-wild state. Their diet mainly comes from grazing oak and chestnut forests.

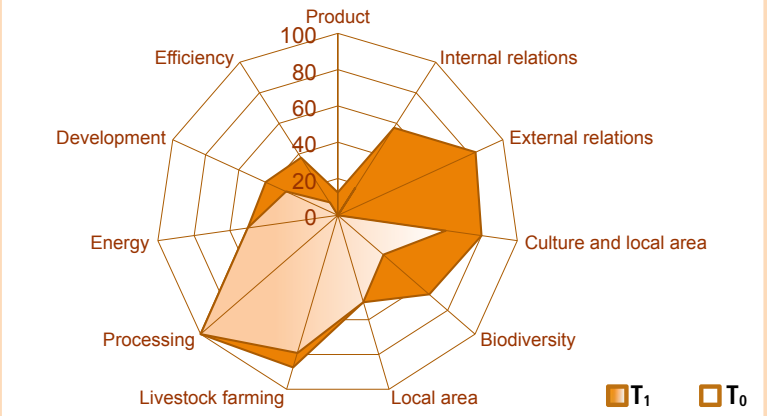


Very positive beginning for all of the components on the agri-environmental scale, which has further improved at T_1 in the *biodiversity* component. On the sociocultural scale the *internal relations* component in particular has shown growth.

Sociocultural sustainability has increased because external and internal relations have improved (particularly due to the creation of organizations) and because many young people have been involved in the project from the start (70% of producers were under 35 years when the Presidium was set up).
The environmental scale has excellent values because from the outset this project connected local producers and farmers. Everyone was motivated to revive free range farming of a local pig breed, the Casentino Grey, raised in small numbers with a particularly sustainable diet (the feed used to supplement pasture grazing is GM free), while also promoting an artisan production method.
The total number of producers has dropped (from 16 to 14) because two butchers have left the Presidium, but at the same time two of the farmers have also become butchers. The number of animals has grown slightly: the farms are very small and large increases are not feasible without adversely changing the character of the farms and methods. Economic sustainability has enjoyed good growth however, due to improvements to facilities, an increase in quantities produced, improved prices and new commercial channels.

Mangalica Sausage – Hungary — Presidium launch date 2004

The Mangalica pig breed was once found across Hungary and in bordering countries, but was gradually replaced by modern crossbreeds. On the Hungarian plains, farmers raise Mangalica pigs free-range and make a distinctive sausage flavored with paprika.



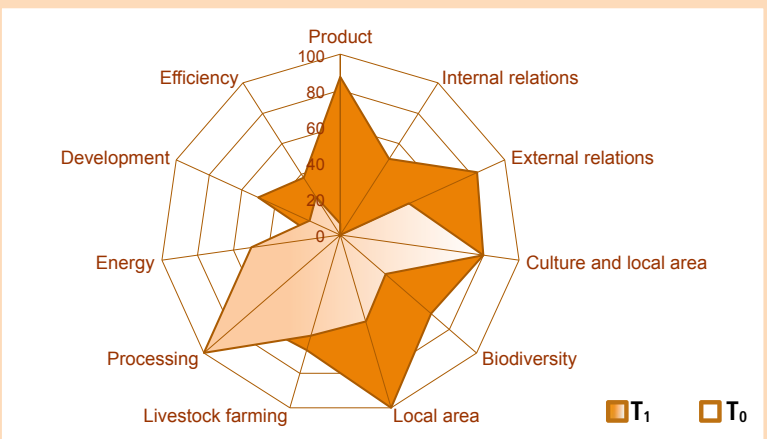
The components that have to do with *livestock farming* and *processing* techniques (agri-environmental scale) started out at a very high level. *External relations* (sociocultural scale) have shown noteworthy growth.

This Presidium has achieved very significant improvements on the sociocultural scale: the producers had the courage to leave a national consortium that did not protect the purebred Mangalica (they accepted crosses with more productive breeds such as the Large White) and created their own association, which has a logo and identifying label. The Presidium, which also includes some young producers under 35 years, takes part in numerous events (national and international) and organizes educational activities for schools and passing tourists (providing the opportunity to experience all stages of production, from slaughtering to casing the meat). The producers have set up the Slow Food Kiskunsag Convivium and play an active role in Slow Food Hungary's activities. The media now pay considerable attention to this breed: a documentary on the Presidium has been filmed and numerous articles in the national and international press have appeared. Previously the producers didn't have any relations with local bodies, while now they have considerable support from local mayors and the natural park.

A small increase has been recorded on the agri-environmental scale as a result of the biodiversity component, due to the contribution made by the Presidium in protecting the Mangalica breed. Other items have not changed significantly as they were high at the time of the Presidium launch: the pigs are raised in the open, fed a high-quality diet mainly grown at the farm (cereals, pumpkins, Jerusalem artichoke and hay in the winter) and the preservative-free sausages are produced using traditional methods, using paprika grown by the producers. The improved economic sustainability is due to an increase in producers (from 10 to 17), a moderate rise in the sale price and some new market outlets.

Nebrodi Black Pig – Sicily, Italy — Presidium launch date 2002

Raised in a semi-wild and wild state in the beech and oak forests of the Nebrodi Mountains, this small, black breed of pig is frugal and hardy. However it has seen numbers drop considerably in recent years.

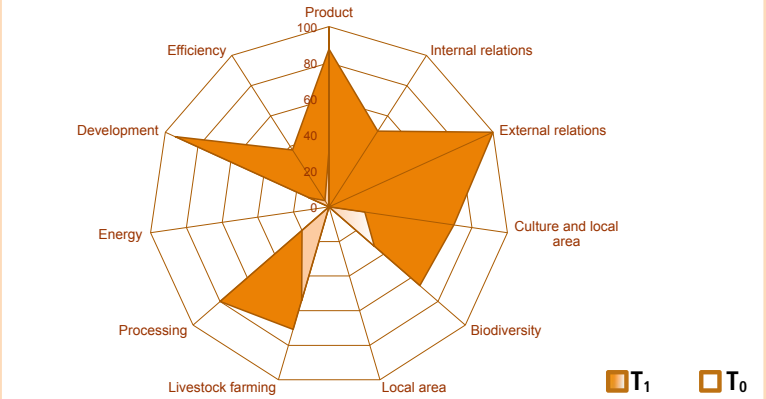


Optimal growth of the components on the agri-environmental scale (mainly in *local area*) and of some of the components on the sociocultural scale (*product use* and *internal* and *external relations*).

The increase in sociocultural sustainability is a result of intense efforts to improve processing methods in order to achieve higher quality standards. Values on the agri-environmental scale have not shown a significant upturn because work to recover the breed and revive traditional methods was already under way when the Presidium was created. Some values are still rising because the Presidium is in the process of implementing improvements (building structures from stones and branches for night shelter and sows, feed trials using cereals and legumes in varying proportions to establish an ideal diet for optimum quality).
Values on the economic scale have risen as a result of new facilities for processing and a shared building for ageing hams (following a contribution from the Sicily Regional Authority), an increase in the number of animals slaughtered (from 1,500 to about 4,500 per year) and number of farmers (before the Presidium there were only small low-profile farms; there are now 3 processors and farmers with another 3 as backup, who make up the number of animals needed for processing), as well as increased quantities of product and a more profitable price.

Modenese White Cow – Emilia Romagna, Italy **Presidium launch date 2005**

The Modenese white cow and the Reggiana red cow are the two native breeds from Emilia. The white was once widespread and used for milk, meat and labor, but now only a few hundred animals remain. The Presidium focuses on the production of PDO Parmigiano Reggiano made exclusively from the milk of Modenese white cows.

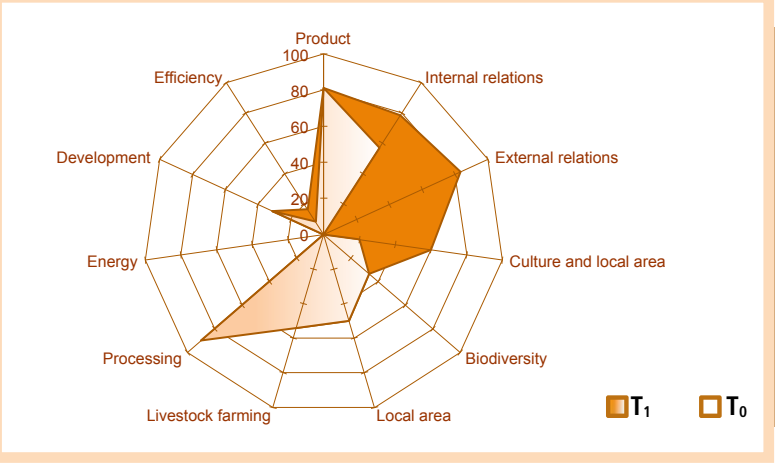


Considerable growth of the components on the sociocultural scale (particularly of *external relations*). On the economic scale the *development* component has shown remarkable growth while on the agri-environmental scale the *processing* component has improved.

The sociocultural scale has recorded significant progress: a consortium has been created bringing together 21 farmers and dairies that produce PDO Parmigiano Reggiano using milk from the white cow; the Presidium is aiming for cheeses with at least 24 months ageing, and promoting Modenese white cow Parmigiano as a high quality product recognized by top chefs (such as Massimo Bottura, who is involved with the project).
Agri-environmental sustainability has improved due to efforts to recover the breed, which started from low numbers (250 purebred animals recorded in the register, now increased to 315), improved farming conditions (which now provide for pasture grazing most of the year) and finalizing rules for processing cheese and meat (though currently only old animals are slaughtered, as the main priority is breeding and milk production for producing Parmigiano Reggiano). In addition one of the Parmigiano producers is organic and is setting up slaughtering facilities to gain certification for the meat.
Economic sustainability has significantly improved as a result of an increase in the number of producers and quantities of cheese (over 700 forms of Parmigiano per year, which was previously not available on the market) and quantities of meat, market diversification, significant investment in buildings (particularly for cheesemaking) with consequent increase in the negotiating power of producers and sale price.

Bagolino Bagòss – Lombardy, Italy — Presidium launch date 2002

Bagòss is an uncooked curd cheese made from semi-skimmed raw milk, produced in the Caffaro Valley near Brescia.



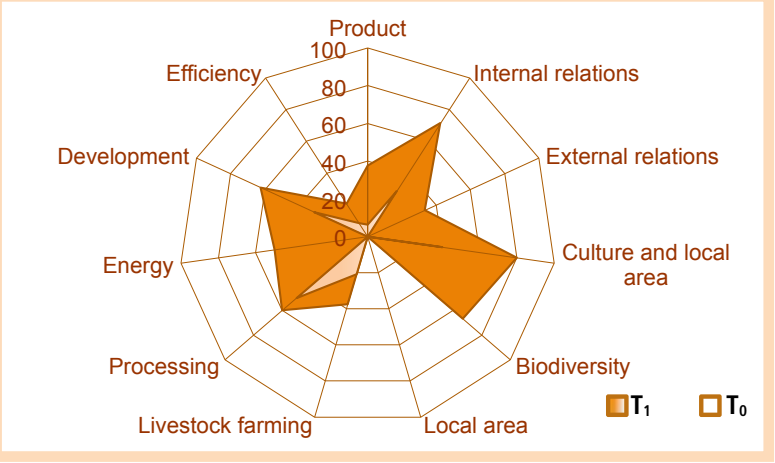
The components that show growth are those on the sociocultural scale (in particular *internal* and *external relations*)

Bagòss is a product with strong local identity and was already of touristic interest when the Presidium was founded. Values of sociocultural sustainability have doubled due to strengthened external relations, expanded consumption, greater participation in decision-making by producers (now in a cooperative), support from local bodies and continuous growth in the role of young people (6 producers are under 35 years).

Agri-environmental sustainability has fallen slightly however, due to the ageing facilities which are now mostly climate controlled. Economic sustainability has increased, but only slightly: the selling price of the cheese has improved, the cooperative organizes shared commercialization opportunities, but the other results are low: the number of producers has dropped, quantities have not increased much and 80% of commercialization is still in the hands of refiners and dealers.

Trentino Luganega – Trentino Alto Adige, Italy — Presidium launch date 2002

Cured Luganega, made from lean pork, lard, salt, ground pepper and garlic, is a very typical product of Trentino. Each valley has developed its own version: some add beef, goat or mutton with spices according to local recipes.



Consistent growth in nearly all components, as compared to the starting point, which was characterized by very low levels of value.

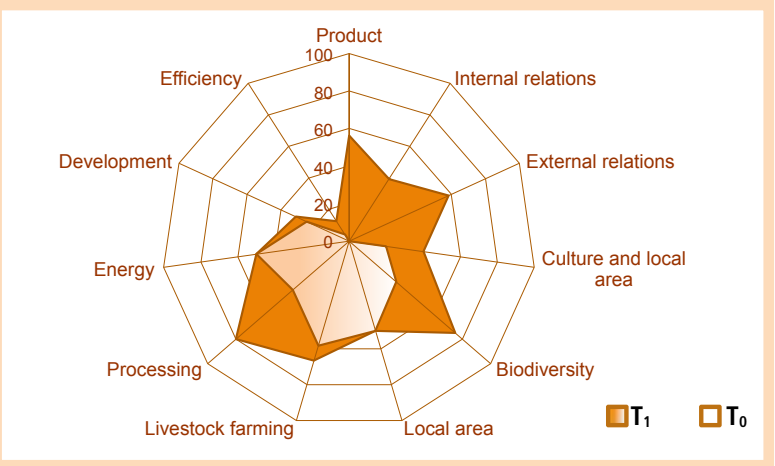
Growth on the sociocultural scale is due to the development of new internal relations in the Slow Food network and participation in numerous events.

The biggest improvement on the economic scale is in the expansion of facilities, while there is only a minimal increase in quantities produced (from 30,000 pieces eight years ago to 32,000), market diversification is not particularly significant and the number of producers is unchanged.

On the agri-environmental scale, the main items are the removal of additives during processing and the exclusive use of meat from local animals. Two local farmers have joined the Presidium, who now supply other butchers. This is outstanding progress in a region where butchers normally source a lot of their meat from other countries. One farmer has a biogas system and a second one uses solar energy for buildings.

Motal – Armenia — Presidium launch date 2005

This distinctive cheese is made from goat's milk and wild herbs in the Armenian mountains. The broken-up curd is pressed into terracotta vessels, which are turned upside down on ashes for two months, then sealed with beeswax.

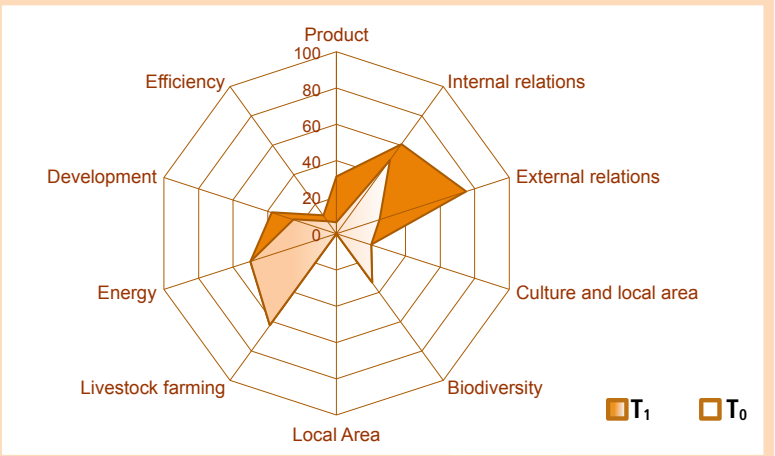


Significant growth in the components on the sociocultural scale (in particular *external relations*) and in some components on the agri-environmental scale (*processing*).

This Presidium has achieved progress on the sociocultural scale, primarily because it has recovered a traditional cheese aging method that was disappearing (aging in terracotta jars). It has also successfully brought together producers who had no previous relations with each other (though a formal association has not yet been created), spread knowledge and consumption of the product and organized numerous training activities (particularly on managing animal health).
There have been no significant improvements on the agri-environmental scale, except for greater attention to animal diet and welfare.Values on the economic scale are still limited due to the low number of producers and animals, but a significant milestone should be noted: aged motal in terracotta had almost disappeared and was not commercially available, while now it can be found on the regional market at various events and in some restaurants.

Limpurg Ox – Germany — Presidium launch date 2009

The Limpurg ox is the oldest surviving cow breed in Württemberg. At the end of the 19th century there were still 56,000 animals but now the Limpurg is an endangered breed with only 650 animals.

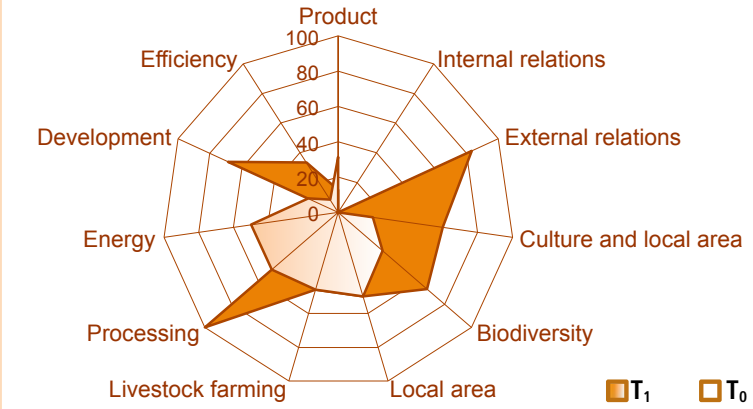


Slow growth of all of the components, with the exception of *external relations* (sociocultural scale), which has shown discrete improvement.

This Presidium was created to protect a breed at serious risk of extinction. Due to the very small number of animals it has not been possible to make significant economic progress: at present it is only possible to slaughter 35 or 40 animals a year, which will rise to a maximum of 50 or 60 animals in future years. Economic sustainability has improved slightly through a more profitable price and market diversification (butchers and restaurants). The agri-environmental scale has improved due to the efforts to protect the breed (the number of animals has increased slightly) and the sustainable farming methods (pasture in summer, free stabling in winter) but there have not been significant changes.
The sociocultural scale has made some significant progress through producer participation in various events, training initiatives and greater visibility for the breed, but in the future better use should be made of the Slow Food network's potential for promoting the Presidium.

Conca Casale Signora – Molise, Italy — Presidium launch date 2003

Signora is a traditional country sausage from Conca Casale. A coarse-textured raw salami seasoned with wild fennel, it also has notes of citrus that come from washing the bladder casing with water and lemon juice. The meat is hand chopped and then stuffed into the casing by hand.

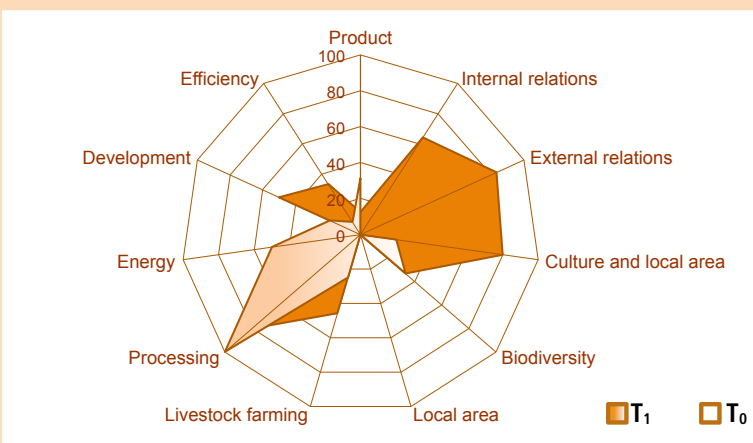


Moderate growth in all of the components, with the exception of the protection of *processing* (agri-environmental scale) and of the *external relations* (sociocultural scale) that have both shown a net improvement.

The sociocultural scale has recorded a significant increase due to increased relationships with the Slow Food network and consumers, but is penalized because the traditional method of preservation in oil or lard has been abandoned. The agri-environmental scale is negatively affected by the use of vacuum packing, but positively impacted by the fact that the one Presidium producer extended his activities to farming (raising pigs), thus closing the production chain.
Economic sustainability is penalized by the situation of having one producer only, and no new ones joining. On the positive side, before the creation of the Presidium this sausage survived only through the knowledge of a few old people and it had completely disappeared from the market. Now the Conca Casale Signora is sold at a profitable price, and the producer has modernized facilities. There has been an increase in the number of animals and in the quantity of sausage produced (from a just a few to 250 per year).

Gioi Soppressata – Campania, Italy — Presidium launch date 2002

One of the oldest cured meat traditions from Campania, this salami is made from the finest cuts of pork, finely chopped, seasoned with salt and pepper and encased in pig's intestine. A piece of lard is inserted into the middle of the salami.



Significant growth of the components on the sociocultural scale (particularly in *external relations*).

Values on the sociocultural scale have risen due to improved internal relations (meetings among producers) and external relations, supported by the Slow Food network (the Presidium participates in numerous events in Italy). Soppressata is a significant attraction for tourists visiting the Cilento region. The fall in agri-environmental sustainability is mainly due to the introduction of vacuum packing for ageing and packaging, which has replaced traditional methods of preservation in oil or lard (this has negative effects both on the agri-environmental and the sociocultural scale). An increase in the number of animals slaughtered and in the quantity of product (from around 400 to 850 pieces per year), an increased number of producers (from 2 to 3), together with new commercial outlets have resulted in a significant improvement to the economic sustainability scale.

CONCLUSION

What are the results of the Presidia project after 12 years? What is their sustainability? Is it possible to measure their effects and implications? The truth is that they are not easily measured using classic parameters. While it is possible to show the increase in quantities produced, number of producers and selling prices, it is not possible to demonstrate the increase in pride and self esteem of the producers (decisive elements for the continuation of an activity that is to be passed on to the next generation), nor the reinforcing of social relationships. The main problems of small producers are often isolation, lack of information, inability to coordinate with other producers or others within the field (packers, processers, chefs), lack of support on the part of the government and the scarcity of promotion and appreciation. It is also difficult to quantify the capacity of the Presidium to improve the environmental conditions of its territory.

Furthermore, the significant increase in some parameters is not an absolute positive, but rather it must be seen in relation to other factors (The increase in price is a positive point, but it must be considered together with positive points in other sectors: attention to the environment, the care of agrarian landscapes, the safeguarding of traditional techniques that are both complex and laborious, attention to animal welfare and so on), just as the decrease in other parameters is not an absolute negative (The reduction in the number of producers, for example, may be linked to the decision to follow stricter guidelines as per quality and sustainability, forging a difficult path that manages to involve only the most forward-thinking of producers).

The method of analysis that we propose in this study is an attempt to interpret and reciprocate this complexity. This method is based on the **three scales of sustainability** (sociocultural, agri-environmental and economic), which were defined at the end of the 1990s to objectively evaluate a continual process that is never static, such as sustainable development.

With this approach in mind the three key concepts of Slow Food were analyzed: **good, clean** and **fair**, which were broken down into various components (for example: "relationships", "biodiversity", "energy"…). Each component, in turn, is the result of single indicators ("energy", for example, is the result of the indicators "use of renewable energy" and "packaging material types"), which act as basic instruments that are useful for the gathering of data and information on sustainability.

The results of the analysis of the data that we have gathered with the first 47 interviews show a **general improvement on all three scales** for the overwhelming majority of the Presidia that were studied. The most innovative elements concern the sociocultural scale (social reinforcement of the producers, visibility of the product, growth of self esteem), a sector that is difficult to analyze also because, at the moment, we have a limited number of studies on these issues within the farming system.

A particularly interesting aspect within the sociocultural environment has to do with the nature of the relationships that are created and reinforced during the time spent in the Presidia. These relationships are never one-way and always take on a **circular form**. The Presidia, in fact, develop and take a virtuous path thanks to a network of players (producers, refiners, salespeople, chefs, technicians, teachers, students, journalists, food lovers, food buying groups, etc.) that, in various ways, collaborate to safeguard, improve and promote production all in order to raise awareness of products, producers and territories even in contexts that are far removed from the area where the actual production takes place. This aspect is possible thanks to the **important role of the Slow Food association**, which facilitates the networking of these various plays, promotion of the products and communication. The increase in visibility, sales and contacts is almost always immediate, already visible within the first year of the Presidia's activity. This is well reflected on the economic scale. Another significant element is the importance of the presence of a key figure (which can be one of the producers or even a veterinarian, agronomist, chef, local politician who supports the Presidium, etc.), a **local leader** that follows the development of the project.

Similarly crucial is the guaranteed support, seen in some cases, of local governments that, by offering funds for the

sustenance of the projects or providing trained technicians, gives significant support to some of the projects. One of the causes (and at the same time, consequences) of the reinforcement of the factors on the socio-cultural scale is the increase in the number of young people in the Presidia, even in those that are in the most outlying and difficult situations (such as the Presidia in the mountains that are connected to pasture and grazing).

The scale of agri-environmental development, apart from cases in which the Presidia begin with data that are already extremely positive, generally demonstrates slower growth, even if in some cases the data are surprising. This is inevitable, because the changes in this sector take a long time by their very nature: New plants in the orchard need time to grow and produce fruit, resources used to restore the landscape or traditional architecture require substantial funding and government authorization, the conversion toward organic agriculture requires years of transition, not to mention the years that it takes to reproduce a good amount of native breeds from the few animals that have survived to the present.

As far as the evaluation of the **prices** of the products is concerned, 12 years ago at the onset of the project, Slow Food already believed that to initiate the recovery of some products that risked extinction or that were highly marginalized by the market, it was essential to guarantee higher earnings for the producers. To pay a fair price for mountain pasture cheeses, salami made from meat of native animal breeds (which are less productive and take longer to grow to full size), naturally leavened breads, legumes that are cultivated in marginal areas and on difficult land is an essential element to convince the producers to remain in their territories and to conserve traditional productive practices. For this reason the evaluation of a price that rises over time – in this study – has been considered a positive. It is necessary, however, to mention that from next year, Slow Food will begin a detailed study on this aspect, in order to analyze the elements that make up the formation of the price of every product and to give directions to the producers as to the price that they should ask, but that are fair also for the consumers, thus avoiding potential exaggerations, be they too high or too low (in some cases, in fact, the asking price does not take into account the various production costs sufficiently).

In conclusion, it can be said that the Slow Food Presidium represents an interesting **development model** for traditional productions realized by small groups of producers. The results are remarkable from an economic point of view (without exception) and confirm the existence of a growing number of high quality products, that at the same time have strong cultural and environmental value. The social element on the other hand can be considered a precondition for being able to achieve and, above all, conserve the end results over time.

The force of Slow Food is powerful, thanks to the media attention that it enjoys on an international level, its network of over 100,000 members worldwide, and more generally, the movement that has sprung up around its activities. It accomplishes rapidly and quickly generating contacts, relationships, opportunities and visibility.

The Slow Food network also works to make the future of the Presidia sustainable, as they do not have a given duration or expiration date, but are "short term projects" that over time grow, evolve and organize themselves, such as the interesting example of educational activities organized by countless Presidia with schools, the creation of guided tours linked to various products and so on.

Torre Guaceto Fiaschetto Tomato – © Alberto Peroli

APPENDIX

Example interview

Presidium name: Ustica Lentil
Production area (municipality, region, country): Ustica Island, Palermo Province, Sicily Region, Italy
Year Presidium was established: 2000
Production protocol: Definitive
Name and role of interviewee: Margherita Longo, producer and Presidia coordinator
Interview date: 15/06/12
Interviewer: Serena Milano

AREA	PRESIDIA VADEMECUM CRITERIA	INDICATORS		EVALUATION CRITERIA	T_0=2000	T_1=2012
SOCIOCULTURAL	Taste	a1	Sensory quality	Link with place and tradition	There is no type of intervention designed to select or improve quality.	Today the Presidium sends the lentils to a company in Naples so that they can be thouroughly cleaned and sorted. The final quality is, therefore, highly improved.
		a2	Preservation	Improvement of preservation quality	When the Presidium was created there was a problem with conservation of the lentils. The producers, in fact, added insecticide to the lentils after the harvest in order to avoid the spread of weevils.	The Presidium introduced a small technical innovation that resolved the problem of weevils: The lentils are placed into a freezer for 48 hours. This thermal treatment does not compromise the vitality of the seeds (which, in fact, can be replanted) but it prevents the diffusion of weevils.
		a3	Processing	Rediscovery of or experimentation with processed products	There were no particular alterations and the lentils were simply sold dried.	Following the creation of the Presidium there were still no particular alterations; however, today in restaurants everyone offers lentil dishes using new forms of preparation. One example of this experimentation is pasta with lentils and shrimp while another is lentil "meatballs". The classic recipe on the other hand is lentil soup which varies depending on the season and preferences of the family: the base of this recipe is lentils, onions, tomatoes, pumpkin or zucchini and a leafy green vegetable (either tenerum of the zucchini or chard depending on the season).
		a4	Product consumption	Increased consumption	The lentils were not available in local restaurants.	Today all of the restaurants in the area have various dishes that use the lentils.
			Internal relations			
	Social sustainability	a5	Role of young people	Strengthening/promoting the role of young people	When the Presidium was formed there were three producers involved who were all over 60 years old.	Today the sons have taken over for their fathers in the management of the rural farms. Two producers are between 40 and 45 years old while another four of them are under 35 years old. Four of the farms are managed by children of farmers while two others have been started without the backing of families. The new producers already had their own land or they use it on loan. When there is no older family member in the farm the younger generation learns thanks to the help of the other producers.
		a6	Role of women	Strengthening/promoting the role of women	The cultivation was carried out by families and therefore women helped, though they had no particular role of responsibility.	Today there are two women as heads of farms and the Presidium coordinator is a woman (Margherita Lingo, 34 years old); while her mother is in charge of marketing. The institution of the Presidium has improved the oraganization of the producers: In principle the men take care of cultivation and threshing while the women are in charge of packaging and sales.

SOCIOCULTURAL		a7	Organization of producers	Improving producers' organization	Before the Presidium, there was no organizing entity among the producers. When the Presidium was created an informal committee was immediately formed, with the aim of packaging and selling the same products with the same labels at the same prices.	In 2008 the association of producers was formed in compliance with Slow Food's rules for obtaining a Presidium label.
		a8	Decision-making structure	A - Transparency and openness in relationships between producers	There was no regulation.	There is the regulation of the Slow Food Presidium and the producers collaborate with eachother: They buy products together (each paying their own share) to obtain the best
				B – Producers' participation in the decision-making process	There were no meetings.	The producers meet each other roughly once every two months (six times per year), particularly when communal decisions must be made regarding participation at manifestations, sending the lentils to Naples for processing, threshing, placing orders for packaging products, etc. There are, therefore, periods in which meetings are more and less frequent.
		a9	Democracy of processes, participation	A – Sharing of responsibilities and decisions	There was no coordinator.	The coordinator coordinates the producers, acts as a mediator between them and Slow Food and coordinates the participation at various manifestations. At times the coordinator even represents all producers at events when it is too expensive to leave the island, with the exception of Salone del Gusto. The coordinator manages the relationship with journalists, students who want interviews and so on.
				B – Deepening of the producers' knowledge and consequent increase of responsibility within the organization	There were no training activities held.	The Presidium has not organized any specific training.
				C – Sharing in the protocol drafting process	There was no comunal production protocol.	Slow Food wrote a draft for a production protocol that has been agreed to by all producers who subsequently made minimal changes to it. As the product does not undergo any sort of transformation the criticisms are few, and between one producer and another the technical differences are minimal, almost non-existent.
			External relationships			
		a10	Relationships with public and private institutions	Improvement of the Presidium's relationship with public institutions and private actors and the possibility of influencing public policy	Before the Presidium, the producers had never benefitted from financial nor technical support, either from the public or the private sector.	In the very beginning the Presidium was supported - thanks to Slow Food - by the Fiorucci company, which acquired a large quantity of lentils. The Presidium is regularly supported by the Sicilian regional government in various ways: technical support (the acquisition of threshing tools) and financial support (funding to participate in Salone del Gusto). The Nature Reserve also supports the Presidium by inviting the producers once a year to promote their products. The producers recognize the fact that they have more decision-making power: their lentils are the only product that is exported from the island and as such the producers are often invited to government functions. One of the producers (Giuseppe Mancuso) is a public figure.
		a11	Relationships with the Slow Food network	Relationships and integration with the local, national and international Slow Food network	Before the Presidium the producers had never heard of Slow Food.	At the moment there is no relationship between the Presidium and the Palermo Convivium, but rather with that of Trapani. There is a relationship with the university: sometimes students contact the producers in order to write their theses. Often universities and other institutions (like Inran and CNR) undertake studies on lentils or ask for samples of the products to perform analyses on their sensory qualities.

SOCIOCULTURAL		a12	Media relationships and communication	Greater media attention towards the Presidium and its local area	Before the Presidium there had never been articles written about the lentils of Ustica.	A description of the lentils of Ustica has been published (both in Italian and in English) on the Slow Food website, which has been used on many other sites as well. The lentil appears in the Slow Food Presidia booklet (throughout the years there have been many editions). When the Presidium was formed Slow Food created a brochure on the product and the producers. Articles dedicated to both the product and Ustica have been published in both regional and national media outlets (in La Stampa newspaper, for example).
		a13	Relationships with consumers	A - Possibility for consumers to learn about the product and the place through the label	There were none.	There is now a common label that describes the product and gives information on the producer. On the label there is both the Presidium's brand and a label showing that the product is organic.
				B - Possibility to recognize the product via a logo	There were none.	There is no specific logo for the Presidium, but they use the common logo for Italian Presidia. The introduction of this label in 2008 was received with suspicion for its cost but this was quickly overcome.
		a14	Events	A - Participation in Slow Food events	Before the Presidium the lentil producers did not participate in any Slow Food events.	The producers of this Presidium, since the year 2000, have participated in every edition of Salone del Gusto (six editions). The Salone is not important for sales (they earn just enough to cover their travel expenses) but rather for the visibility and contacts that they acquire there.
				B – Participation in other events	Before the Presidium the producers did not participate in any other events.	With the exception of the Salone, the producers do not participate in many events due to the cost of leaving the island. They do however receive many invitations both from Sicily and all over Italy. They have participated a couple of times at Sana (in Bologna).
	History, culture, link to the local area	a15	Product-place identification	Strengthening awareness of the link between product and place	Lentils were a part of the local agriculture but were not very appreciated. Other products, like wine grapes and melons, were much more prized due to their higher market value.	Today the situation has been reversed: the lentils are more cost effective while the other products are almost completely outside of the market. Lentils are also the most identifying plant product of the island, presented as such on restaurant menus and in tours. There are no lentil festivals but sometimes there are lentil soup tastings organized in the town square.
		a16	Architectural heritage	Promotion and restoration of the local area's architectural heritage	No	No
		a17	Transmission of knowledge	A – Horizontal transmission: improvement of the awareness of the community (not only local) regarding the need to preserve the product and the place	There were no educational activities.	The Presidium does not regularly organize educational activities, though at times students go on field trips to meet the producers. The Presidium coordinator has created a small farming museum.
				B – Vertical transmission: recognition of the role of the elderly	The older generation had an important role in the families and the Presidium started out with three producers who were over 60 years old.	The older producers are no longer the heads of the farms, which have been passed on to their children, but they do actively collaborate in field work and give precious advice.
		a18	Tourism development	Creation and development of tourism activities	Ustica was already a well-known tourist destination.	The Presidium represents a distinctive element that contributes to the level of tourism on the island. Two of the producers of the Presidium have an agriturismo (farmstay).

AGRI-ENVIRONMENTAL	Risk of extinction	b1	Variety	Contribution to the preservation of native varieties	Before the Presidium there was no interest in the Ustica lentil variety.	Several studies have been performed on the lentils from Ustica, especially by the University of Palermo. When the Sicilian, Calabrian and Pugliese universities (or research institutes) studied legumes, they always placed the lentils of Ustica within the panorama of Mediterranean lentils. The CNR of Bari and other nutrition institutions gathered samples of these lentils to analyze them. The Ballatore Consortium (of Sicilian) has done research on yield and the density of planting (a project that brought about the acquisition of threshing tools for the Presidium producers).
		b2	Processing technique	Safeguarding of traditional production methods	Before the creation of the Presidium threshing was done in the yard with the help of donkeys. This system was very slow and did not allow for the creation of a high quality product.	Directly after the creation of the Presidium, it was immediately clear that the system of threshing had to be changed in order to make cultivation more efficient and cost effective. Thanks to the collaboration of the regional institute of Ballatore and the economic support of the Sicilian regional government, the producers were given a mechanical thresher, which at first was in a fixed position and later was semi-mobile.
		b3	Landscape	Preservation of a particular rural landscape at risk of extinction (gardens, historic orchards, ancient olive groves)	The landscape is highly valuable and part of the island is a nature reserve.	The landscape is highly valuable and part of the island is a nature reserve (both marine and land). The relationship between the producers of the Presidium and the nature reserve is not positive. The producers would like to cultivate some of the land that falls within the reserve (around the village of Punta Spalmatore), which was historically cultivated and terraced. The nature reserve refuses to allow the cultivation, which would facilitate the rotation of crops in order to preserve the land.
	Environmental sustainability	b4	Production diversification	Increased diversification in production	All of the farmers cultivated other products as well: fruits, vegetables, legumes, etc.	All of the producers of the Presidium cultivate other products besides lentils (fruits, vegetables, other legumes, and in one case, grape vines) but the percentage of each crop has changed in favor of lentils, which is the most cost effective of all their products.
		b5	Territory	Promotion of activities aimed at safeguarding the agricultural environment and maintaining traditional farming practices	There was no particular care for the land and many of the arable fields had been abandoned.	Many of the abandoned fields have been recuperated, cleaned and put back into production. In several fields there were stone separating walls that have been cleared of brush and bushes.
		b6	Seeds	Local production and/or self-production of seeds	Each producer grew their own seeds.	Each producer of the Presidium selects and multiplies their own personal seeds. Sometimes the producers exchange seeds. The thermal treatment that discourages the diffusion of weevils does not harm the germination of the seeds.
		b7	Rotation	Crop rotation to preserve soil fertility	Each producer rotated their crops, but the extention of the lentil fields was minimal.	The necessity of rotation is the Presidium's main problem. The increase in the production of lentils has aggravated the problem of the presence of a fungus (Fusarium oxisporum). This fungus has existed for a long time, but with such a reduced cultivation of lentils its presence was marginal. Some of the producers rotate their crops (either leaving the fields fallow, planting vegetables or even barley and oats for the few animals on the island) but not enough. The problem, in fact, is due to the huge disparity between the earnings gained by the sale of lentils and the sale of all other cultivations (grains have no market because there is nobody on the island who makes flour); animal feed has no market because there is no butcher on the island and therefore there are very few animals, etc.)
		b8	Intercropping	Intercropping to preserve soil fertility	No	No
		b9	Fertilization	A – Reduction or elimination of mineral fertilizers	No	No
				B – Use of organic fertilizers	No	No
		b10	Pest and disease protection	A – Reduction or elimination of chemical methods to combat plant parasites and diseases	No	No

AGRI-ENVIRONMENTAL	Environmental sustainability	b10	Pest and disease protection	B – Use of natural methods to combat plant parasites and diseases	No	No
		b11	Weedkilling	A - Reduction or elimination of chemical methods to combat weeds	No	No
				B – Use of natural methods to combat weeds	Manual weeding.	Manual weeding.
		b12	Post-harvest treatments	A - Reduction or elimination of chemical post-harvest treatments	When the Presidium was created there was a problem with conservation of the lentils. The producers, in fact, added insecticide to the lentils after the harvest in order to avoid the spread of weevils.	Today the Presidium does not treat the crops with chemicals after harvest.
				B – Use of natural post-harvest treatments	When the Presidium was formed the producers did not know about natural post-harvest treatment systems.	The Presidium introduced a small technical innovation that resolved the problem of weevils: the lentils are placed into a freezer for 48 hours. This thermal treatment does not compromise the vitality of the seeds (which, in fact, can be replanted) but it prevents the spread of weevils.
		b13	Irrigation	Use of irrigation systems that limit water consumption	No	No
		b14	Renewable energy	Use of energy from renewable sources	No	In 2012 two Presidium producers placed solar panels on the roofs of their farms.
		b15	Certifications	Obtainment of production certification or brand registration	No	All of the producers of the Presidium have the certification that their products are organic.
		b16	Packaging	Use of minimal packaging and/ or packaging made from recycled/ recyclable materials	No	Each producer is responsible for their own packaging.

ECONOMIC	Small scale	c1	Surface area (hectares)	Increase of the overall surface area where the Presidium product is cultivated	1 - 2 acres.	Twenty acres, to which we can add the land cultivated by smaller-scale producers that are not in the Presidium but who sell their lentils locally and benefit from the Presidium by proximity: use of the threshing tools, higher prices, visibility and so forth.
		c2	Number of producers	Increase in the number of producers	3 producers	6 producers
		c3	Employment	Increase in employment along the Presidium production chain	Before the Presidium every family member worked on the lentils, without any outside help.	Today the activity is still managed by families, but there are also salaried seasonal workers. In each family either two or three people work on the lentils.
		c4	Quantity produced (only of the Presidium product)	Increase/reduction of quantity produced	7 quintals.	200 quintals.
		c5	Market diversification	A – Expansion of market	Only local.	Local: 10%, regional: 15%, national: 75%. International sales are only sporadic.
				B - Activation of new commercial channels		10% of the product is sold to visiting tourists and restaurants on the island; a small percentage goes to local festivals and, for a few of the producers, to local food-buying groups. The majority of the product (80%) goes to specialized Italian stores and delis.
				C – Increase of producers' negotiating power	No	No
		c6	Business expansion	A – Expansion of production structures or construction of new structures B – Resolution of conflicts over land		One producer, thanks to the contribution on the part of the Sicilian regional government, has constructed a space for storage and packaging. The new land in use was neither bought nor rented, but rather used on loan or by verbal agreement.
		c7	Sales price	Profitability of the product	5,000 – 6,000 lira/kg. (2,000 lira = 1 euro)	From €9/kg (in bulk) to €12/kg (in smaller packaging)
		c8	Economic alliances	Partnerships with other businesses, distributors, etc.	No	In the early years there was a partnership with the Fiorucci farm, which supported the Presidium and acquired a large amount of lentils to sell at Christmas (with zampone or pig's trotter, a typical Christmas dish in Italy). The relationship with the company in Naples (that cleans the lentils) is not a partnership: it is more a paid provider of services. Today a producer of the Presidium sells the lentils to the producer Tasca d'Almerita which has a line of Sicilian products called La Natura in Tasca.

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Financed by the European Union.
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